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and Gromit in:  
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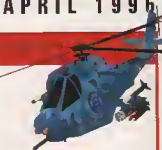
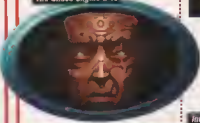
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## DATAFLYER SCSI+

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# DISK 130

- **AmiFileSafe**
- **Virus 2**
- **HippoPlayer**



## HippoPlayer

HippoPlayer is an intelligent music module player which is capable of loading and autodetecting the format of a wide range of modules, including ProTracker, OctaMED, SID, TFMX, ScreamTracker, FastTracker and more. Modules packed with XPK, Flmp, PowerPacker, Lha, LZX and Zip compression systems are supported. The Reqtools library must be in your Libs: drawer for it to work. If you've already installed the rest of the disk then this should already be the case, and if you have a hard drive, you may have it from some previous application's installer. Try running the HIP program and if you need the library you'll be told so, in which case you can run the Install\_Vitals script first. Full documentation is available in the form of the HIRguide document.

**Keep your data safe as houses with AFS, Virus 2 and HippoPlayer, all on cover disk 130.**

**I**f you don't have CD-ROM capability and have our floppy disk version instead of the CD-ROM one you won't be disappointed. We've got some very handy utilities on there

## Ami File Safe

Ami File Safe (AFS) is an alternative filing system for your floppy disks and hard drives. Disks formatted with AFS are faster, more efficient and less prone to errors than disks formatted and written with the Amiga's built-in filing system. AFS also allows you to fit more data on your disks.

Cover disk 130 contains two versions of Fourth Level Development's AFS. One is a complete version for use with floppy drives while the other is for hard drives, limited to a maximum partition size of 10Mb.

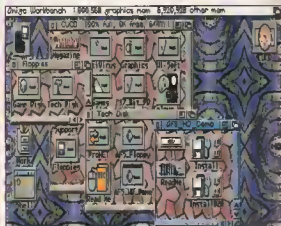
## Floppy installation

If you are running a floppy-only system you'll first need to make a

copy of your Workbench disk and clear some space on the copy. Rename the copy of Workbench so that it is named exactly the same as the original. Put the original Workbench disk away and work only with the copy for now. Leaving the copy of Workbench write enabled, delete the Tools drawer to free up some space.

Boot from your Workbench copy, insert cover disk 130 and double click on its icon. Open the AFSFloppy drawer and you'll see four icons in a new window marked install. 2.0 and install. 3.0, along with 020 versions of both. The 2.0 and 3.0 refer to your Amiga's operating system (Workbench and Kickstart), while the 020 versions are for Amigas with 68020 or better processors. Double click on one of the icons according to your system.

AFS will now be installed onto your copy of Workbench. If you have just one floppy drive you'll be in for a lot of disk swapping but everything will work out in the end. Time to get a hard drive perhaps? Whenever you want to use



▲ AFS can really improve your disk efficiency



## VirusZ

VirusZ is a neat virus checker that sits in the background of your Amiga's operating system, checking for suspicious activity that could be caused by a virus. It can also be used to check specified disks and files for virus infection. We chose to include VirusZ on disk 130 as its "broom file" is well up to date and can detect just about all the latest viruses. We can't guarantee that it will catch every virus, as new ones appear all the time, but it's the best way to keep your Amiga safe.

To run it on a floppy-only system you'll need some space free on your Workbench disk. This is because VirusZ needs a library that it expects to find in the Libs drawer of your Workbench system. If you've already installed AFS Floppy as described on the page opposite you should have enough space on your copy of Workbench Boot disk and then double click the Install Libs icon in the VirusZ drawer. The relevant files will be copied to your Workbench disk. You can now run the VirusZ program straight from the cover disk.

Hard drive users should boot the hard drive and then use the



▲ VirusZ on disk 130 and the Libs



▲ Installation is very simple.



▲ Configure VirusZ to your requirements.

install Libs icon. If you have the CD edition you'll find VirusZ in the AntiVirus drawer. We recommend you drag the VirusZ icon into the WBSStartup drawer, or alternatively copy VirusZ onto your hard drive and call it from the userstartup sequence.

## What to do with VirusZ

Once VirusZ is running you can set a number of options to configure it to your requirements. Click on the VirusZ bar at the top of the Workbench screen so that it becomes active. Now when you hold down the right mouse button you'll see VirusZ menus appear rather than the usual Workbench menus.

Selections from the first menu will carry out tasks, while the second menu is used to set the options for the tasks. From the Prefa/File Check option we suggest you click the Deinstall Executables button and save the changes. This will mean that compressed files will be unpacked and checked during a File Check process. To check a disk or a directory of files, select the File Check option from the

Project menu, choose your area from the file requester (use the Alt button for speed once you've selected the disk) and click OK. You'll be given a progress report as the program checks all the files. If you have AmigaGuide installed on your machine you can read up on all the advanced options. An English guide document on the disk

AFS disks you will need to boot with this copy of Workbench.

## Using AFS Floppy

Now it's installed, you won't actually get an AFS disk icon on the Workbench until you have formatted an AFS disk. Because there is no disk icon you can't use the Workbench menus to format an AFS disk - you'll have to use the Shell instead. Enter the following in a Shell window, pressing Return after each line:

```
cd sys:system
resident format
```

The above lines will make formatting disks a lot simpler. Now to actually format an AFS disk, insert a blank into the internal floppy drive and enter the following all on one line and press Return:

```
format DRIVE a0: NAME
afsdisk
```

In the line above, pay close attention to the case of the letters

(capitals where appropriate) and make sure you enter AFD with a zero, not a letter O. You can now read and write to and from the disk in the internal drive by addressing it as AFD. You'll notice that an icon called "afsdisk" has now appeared on the Workbench. When you format another AFS disk, change the "afsdisk" part of the line above to a different name. This will become the volume name of the formatted disk.

## Hard drive installation

To install AFS onto your hard drive, boot from your hard drive and then insert either cover disk 130 or the CD if you have the CD edition of this month's CU Amiga Magazine. If you want to use AFS on both floppy disks and your hard drive, you'll need to run the floppy installer too. Double click on the relevant icon from the AFS Floppy drawer and see the text above marked Using AFS Floppy for more details.

Installation of the AFS HD demo is more complex. Select or

make a subdisk partition on your hard drive. All the data in the selected partition will be destroyed when installing Ami-FileSafe, so make sure you make a back-up. Ami-FileSafe must be installed in the L directory. You can do this by double clicking on the Install or Install200 (For 68020+ machines) icon.

Now you can install Ami-File Safe on the RigidDiskBlock. You can use Commodore's HDToolbox which comes supplied with the Workbench software. We assume here that you will use HDToolbox. If you use another tool you should refer to its documentation.

Select Advanced Options in the Partitioning window. A number of extra buttons will appear. Click on Add/Update, and then click Add New File System Type in

### LiHardDiskAFS

for the name of the file system. Set the DosType field to 0x1466301 and then select Ok. Go back to the Partitioning window, select the desired partition

and select the Change button. Select Ami-FileSafe (AFS1). Use all the default options: autmount on, block size 512, 2 reserved blocks.

If you are using an older version of HDToolBox and there is not a Change button then click on Custom File System and then type 0x1466301 into the DosType field. Change the Buffers field to a value between 50-200 depending on how much memory you have (1 Buffer = 1K).

If you are using an IDE drive then set the MaxTransfer value to 0x1ffff. Now select Ok and the Partitioning menu will appear again. Fill in the name you want the device to have in the Partition Device Name field (e.g. DH1). Set the Bootable flag if you want to boot from this partition. Go back to the main screen and save the changes.

Ami-File Safe should now be installed on the partition. Reboot and format the partition from Workbench. If you have done something wrong then go back and start again. ■







# DISK 129

## Leading Lap SE

A game by Reflex  
Interactive/Kellion



### These are the main controls:

- Joystick forward: Accelerate
- Joystick back: Brake
- Joystick left: Turn left
- Joystick right: Turn right
- Esc: Quit race/Continue
- P: Pause end options
- Space bar: Toggle camera height
- F1-F10: Adjust viewing angles/view other cars
- Return: Return to your car



Chose your driver, choose your car, fire up those engines and get going. This polygon racing sim is yours **EXCLUSIVELY** from CU Amiga Magazine ...

**I**f software houses won't publish games like Leading Lap for us we will. It's not the full commercial release though - how would Reflex Interactive survive if we went around putting their bread and butter on our disk? But it is the full game nonetheless, with five tracks, that's why it's the special edition. We'd sooner bear the brunt of bad feeling in the games industry than see you deprived of it though.

There are two versions on the disk, for both AGA and EGS. The A500/600 version will work on the A1200 and it'll be faster too, but the AGA version does have more sound effects and more detailed scenery. Needless to say the AGA version will not work on an A500/600. You will need to decompress the version of your choice to a separate single disk. This is a simple process. 1. Have a new, blank formatted disk close to hand and turn off your Amiga. 2. Write protect disk 131 and insert it into the internal drive. 3. Turn on your Amiga and wait until a CU Amiga loading screen appears. This will have two disk icons on it. 4. Follow the instructions to press either F1 or F2 to decompress either the AGA or standard version on Leading Lap to your blank disk 5. Once all files have been decompressed onto the blank disk simply restart your machine with this disk

in the drive and the game will start. Label this new disk "Leading Lap SE". Put disk 131 in a safe place in case of future problems if you have any difficulty decompressing or loading the disk then turn to page 23 for advice

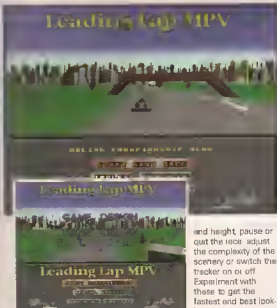
### Running Leading Lap SE

Leading Lap SE is simple to load and run, but it'll take some time to get used to the tracks. It requires joystick or joystick and will not respond to mouse control. Once you've loaded the game you'll enter a menu screen which asks you to Start Season or enter a Grudge Match. If you have a serial null modem cable you can use the grudge match option to play against a friend with another Amiga. More details about this under the heading Serial Play.

Pressing the Start Season option will bring up your choice of driver. There are five to select from and you can find out more about them by pressing the driver stats button on the driver select







and height, pause or quit the race, adjust the complexity of the scenery or switch the tracker on or off. Experiment with these to get the fastest and best looking set up on your

individual machine

### Serial linking ...

If you want to get really competitive you should find a friend with an Amiga and a null modem cable. You can link up two A500s or two A1200s or, say an A500 and an A1200. If you do the latter though you must remember that the person with the A1200 will have an advantage and you must be running the non-AGA version on both machines. This type of link will crash more often than a link between two similar machines.

To link up you need to have the cable plugged into the serial ports

screen. Once you've chosen your driver press on next. This will bring up your car selection screen. Here you have a choice of three vehicles. Pressing on next after this will bring up the Racing Championship menu. Here you can enter the championship immediately by choosing to Start Next Race, or practice any one of the five tracks in the Practice mode.

### Racing controls

Leading Lap uses both joystick and keyboard during a race. The joystick is the primary control device but using the keyboard you can adjust the viewing angle

### Problems and the track editor

There are two versions of Leading Lap on both the cover disk and CD you now own. It is fully functioning in all ways: you can enter competitions, you can race against human competition using a serial link, you can do everything you could in the full version of the game we reviewed three months ago, except race on some of the tracks. This is yours to play for as long as you want, for the cover price of the magazine, there are no catches. But Reflex Interactive, who supplied us with the game, are doing an upgrade offer too, the sort of one you usually see with a utility. This gives you seven more tracks, extra sound effects, a track editor (AGA only) and an objects suite (AGA only) which will allow you to make up your own tracks. This is the difference between Leading Lap MPV as reviewed and Leading Lap SE. If you have any problems with Leading Lap SE or you would like to upgrade to the extra tracks and the editor, please write to Reflex Interactive at CU Amiga, Leading Lap SE, REFLEX INTERACTIVE, 13 Hawley Crescent, London NW1 8NP. The extra 7 tracks and SFX is available for A500/600 at £4.99 plus 1.96 P+P, while the AGA only track editor, plus the extra tracks, objects and SFX is £12.99 plus £1.95 P+P.

### Compatibility ...

Leading Lap has been tested on Amiga 500, 500+ 600 1200 and 4000. It works even if there is a hard drive present and works with the Blizzard 1230 accelerator board we use regularly. However, if you have problems with Leading Lap it may have something to do with the peripherals you have plugged in. If so, test it without your RAM or Accelerator, or any other peripherals. It will work! Believe us?

of both Amigas, and then load Leading Lap SE. When you reach the first options screen select Guide Match and then simultaneously select either Grudge League or Single Match from the next two selections.

If you are properly connected the link will take about 5 seconds to establish. After this one of you should receive a message saying something like "link successful, you are the slave". The other will receive a message saying "link successful, you are the master". It is important that the slave makes their driver and car selection first, otherwise the link has a tendency to crash. Once the slave has made his or her selection the master needs to select drive, then car, then which one of

the five tracks you want to race on. After this the race will begin as normal except you'll both be racing against each other on different Amigas and different screens.

If your link crashes then restart everything all over again, having first checked that your null modem cable is properly connected.

All serial links have a tendency to disconnect from time to time for no apparent reason, but if you play things by the book it shouldn't happen too often. ■



### On the CD

If you have the CD-ROM version of the magazine you will find Leading Lap already uncompressed in the Floppy folder. To run it on an A1200 simply double click on the AGA version to run it on an A500/600 double click on the standard version. If you have a CD32 you will unfortunately not have enough memory to run the full AGA version so double click on the standard version. This is faster anyway, so don't worry. A bonus for CD32 owners is that the joypad operates the various views via its multiple buttons. Try this.







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# What's on your



**Mat Bettinson guides you through the 650Mb of goodies on this month's cover CD.**

## Getting started

You can boot this month's cover CD on any CD-ROM compatible Amiga or CD32. Alternatively you can boot from your hard drive first and access the CD from there. If you choose this method, double click the InitCD icon (this is a very small icon in the bottom right of the CD window). This will set up the system so that much of the software can be run straight from the CD. There's no need to do this if you booted from the CD.

You'll notice that the icons are rather attractive but the colours may not be quite right. If this is the case, double click the ColourMe icon. These rather attractive icons were kindly supplied by Tom Ehnström from his Iconography 3.0 set.

All of the main areas can be access from the root directory of the CD (the main CUCD window). In general, if you open a drawer and find some icons inside, you should be able to click and run them. On the other hand, if you are presented with a list of filenames and no icons, it's likely that these files must be loaded into an application or handled in some other way (such as the Imagine objects for example which can only be used by loading them into Imagine).

The drawer icons that feature a tick mark all contain demos of existing CD-ROM titles and commercial packages, with a very generous selection of the software for you to try out. These CD previews are themselves contained in drawers marked with CD icons. These CD demos have their own front-ends that are used to access their files.

Now here's a guide to all the major areas of this month's CU Amiga Magazine CD-ROM.

## Floppies

**Contents:** ECS (A500) and AGA (A1200) versions of Leading Lap SE full game, Virus2 anti-virus package, AFS hard drive demo, AFS floppy full version.

Leading Lap SE can be found here in DMS archive format, for both ECS and AGA machines.

The Tech disk section contains the complete Planet system with full documentation. For more information on the rest of the programs in this drawer, see the floppy disk instruction pages.

Shortly after the CD went to press, we found the Virus2 drawer mistakenly contains Virus Checker and not Virus2. This is not a problem since Virus2 is also present in the Antivirus drawer off the root of the CD. Installing Virus Checker isn't a bad idea either for double protection. Installation is easy. Just boot from your own Workbench and click on the Install\_Virus\_Checker icon.

## Magazine

**Contents:** tie-in files for the following magazine departments areas: PD Scene, Wired World, Graphics Masterclass, Q+A Masterclass and more.

The freely distributable software from PD Scene can be found in this drawer. All the software here is stored as DMS archives because it

would not all run from the CD. You'll be prompted for blank disks as you select them. Also see the Misc/The Party '95 drawer for more demos, some of which run from the CD.

Graphics Masterclass contains images for use with this month's tutorial, along with a few from previous issues. You'll find some more in the Images directory which includes some that were missing from our previous CD-ROM edition.

The Wired World directory contains the newest version of Metatool, the MIME encoding/decoding tool as featured in John Kennedy's Wired World tutorial this month. In order to install to your hard drive, simply drag the directory to an appropriate place. The Q+A Masterclass directory contains the ARexx script files as covered by John Kennedy in the Q+A Masterclass tutorial this month. Finally, the Amiga E directory contains virtually all the developers material for Amiga E as cover mounted on the December edition of CU Amiga Magazine. A great many archives have been extracted to this directory so viewing via Workbench will be messy. A directory utility would be best to find the Amiga E support files you need. Documentation for each will also be present in the same directory.





# CD-ROM



## Support

**Contents:** Iconographics icon replacement set, MUI 3.2 (fixed) support GUI system, Deltracker comprehensive module player and Viewtek 2.1 viewer.

The Support drawer contains a number of programs that are required by the CUCD and its software. First off, the Iconographics package is the top left icon. Click on Install Icons to install these icons onto your Workbench, or the IGfx Preview icon to show a picture of an example Iconographics Workbench. The IconInstaller program is a manual installation method using a drag and drop interface.

Magic User Interface 3.2 (MUI) is an extension of the Workbench system and is required by some software. If you didn't boot the CD, you'll have to click on the InitCD icon in the root directory to temporarily run MUI from the CD. If you intend to install MUI it would be a good idea to drag the MUI drawer onto your own HD as it will run much quicker.

The SuperViewCD drawer contains an exclusive CD demo of the wonderful multi viewer/converter package called SuperView. SuperView uses special loader and saver libraries to load virtually any type of picture and save out as any other type of picture. What's more, it can display on virtually any display system from the Amiga's native ECS and AGA chip-sets to graphics boards and RTG systems such as CyberGraphX. Read the docs to gain more information and if you think it suits you, click the Install\_SuperView icon to install to your HD.

Deltracker\_II contains the Amiga's most powerful and comprehensive module playing utilities around. It handles virtually every type of module and can play from Fast RAM and even 14-bit playing and headphone mixing. Reading the documentation is highly recommended. Deltracker is activated by the Johan Alpmar ProTracker and the ScreenTracker jukebox icons in the modules section of the CD.

Finally, ViewTek is a picture viewer able to handle most types of files. It's simple to use and downgrades high-colour pictures such as 256 colour GIFs/JPGs and JPEGs to ECS HAM6 screen modes on non-AGA machines.

## Games

**Contents:** Worms Special section, Blitzbombers demo, Watchtower demo, Nemeq IV demo + many full PD/Shareware games.

Click on the Worms Special icon and you'll find a number of support files for Worms and a preview of a forthcoming Worms Enhancer CD-ROM. The mapps contained in the Custom directory must be copied to your Worms TWCustom drawer on your hard drive or onto fresh disks if you're playing from floppy. Read the documents here to find out more about the Worm map creators.

Next are four large ball icons with CDXL in their names. These are two of the CDXL animations from CD32 version of Worms. The CD32 icons should be clicked on only by users of CD32s and CD32 emulating CD-ROMs. The others should be used by those using SCSI CD ROMs.

The last directory TWENGLISH, is a complete replacement sample set made by the CU Amiga team. Some of the samples come from smaller replacement sample sets. Many thanks to Jon

## AntiVirus

**Contents:** Virus Checker and VirusZ anti-virus package complete with VList list of late-virus infected archives and files.

To tie in with our AntiVirus feature in CU Amiga Magazine this month, the top two virus checkers are included so that you may rest easy against the threat of a demagoging virus attack. It's best to boot from your hard drive if you want to install these. To install Virus Checker click on the Install\_Virus\_Checker icon.

Before you can run VirusZ you'll need to click on the Install Libreses icon. Now drag the entire VirusZ directory onto your hard drive. Now you can put either or both of the virus checkers in your WBStartup drawer to have them permanently resident. Check page 10 for further VirusZ instructions.



Guidry and Richard Smith for their contributions. To install this set onto hard drive, open up your Worms directory. Select the window and choose Window>Show/All.

Files from the Workbench menu. Find the drawer called TWENGLISH and rename to TWENGLISH\_OLD. Then simply drag the TWENGLISH drawer from the Worms Special directory onto your Worms directory.

Please note that floppy drive users will need to format a floppy disk with the name TW2. Then drag the TWENGLISH directory into this floppy disk. When Worms is running and asks for the second disk, insert your new floppy disk instead of the original Worms disk two. OK. Now enjoy.



## Sound

**Contents:** OtaMED SoundStudio demo, Audio Lab 16 demo, high quality 8 and 16-bit samples, ProTracker, OtaMED and ScreenTracker modules and Jukeboxes.

The Sound drawer contains a save disabled demo of the 16-bit capable OtaMED SoundStudio (see the preview on page 68). An AudioLab 16 2.0 demo is included which can take digital sample data from audio CDs, provide DSP style effects, process 16-bit samples and more. Tony Horgan has returned with another sound sample collection. The drawers are split into 8 and 16-bit samples. The 8-bit sound samples are a varied bunch including loops, hits, effects and so on. Double click on them to hear them. Udu/FB has supplied some original drum loops. For 16-bit audio users there's a complete TR-909 drum kit and some TR-909 bass drums.



A great deal of modules in many formats are included in the modules directory grouped into ScreenTracker, OtaMED and ProTracker. The ScreenTracker module collection has a special jukebox icon which will launch DelTracker to play from the collection at random. The ProTracker collection has a jukebox dedicated to module author Johan Ainar. All of Johan's works that we could find are included again the jukebox will play from them at random.

The OtaMED directory contains the entire works of Samuel Gilbert AKA Orpheus, plus a few of Tony Horgan's old mods. All these modules have icons to launch DelTracker. The modules with the 'g' postfix are special 9-bit modules and DelTracker will use its 14-bit noteplayer to render them correctly.



## Graphics

**Contents:** Fresh Fonts 1 + II CD preview, Amiga3D Imagine objects CD preview, Dust utility for rendering packages.

The CUCD Graphics drawer is loaded with four massive CD previews. Fresh Fonts Vol I contains many megabytes of DMF fonts suitable for PageStream (December's cover disk). The fonts can be loaded straight from PageStream. Fresh Fonts Vol II contains megabytes of IntelliFonts, support for which is built into Workbench and many other Amiga programs.

The Amiga-3D CD preview is an exclusive 20Mb sample of Imagine 3D objects from the BitSoft Amiga-3D CD. The objects have no icons and so you will have to access them directly from Imagine. However, using the Hi-Soft MagicLink's demo might give you a better idea of what each object looks like.

The IML drawer contains a massive back archive of Internet Imagine Mailing List archives as large text files and AmigaGuts. You will need to use a text viewer or Amiga Guide utility to view them. They are an excellent reference for troubleshooting with Imagine.

The Dust drawer contains a powerful package for producing 'particle' effects for Imagine and other types of rendering package. Dust will run from the CD but it's recommended that you drag the drawer across to a hard drive partition if you intend to use it regularly. Again comprehensive documentation is provided on the CD for the package and in the case of Dust, it's an essential read. Click on some of the faces for some example images of what Dust can do.

Texture Portfolio represents the final CD preview, this time from Ground Zero PD, and is a selection of high quality JPEG 24-bit textures, which can be used for several tasks, such as backdrops for multimedia and wrap-on textures for 3D rendering. The collection has icons for each picture which when clicked will activate the ViewTex viewer to display the texture concerned. Clicking on the Portfolio\_Aid icon in the root directory of Texture Portfolio will reveal ordering information for the excellent IML CD. These are also support utilities for Imagine.

All texture contains some new third party mathematical textures for Imagine 3.0 and above. AnimFlare is an example project and tutorial for producing animated flare effects and the d3magine guide is a comprehensive AmigaGuide Imagine tutorial which if used in conjunction with the Imagine Mailing List archives and Imagine HTML tutorial/reference in the Comma/WWW section provides a massive reference for this excellent rendering package.



## Hi-Soft

**Contents:** Demos of Cinema 4D rendering package, Magic Link 3D object converter, Disk Magic directory utility, Termite command terminal package, Twist 2 database and more.

All of the demonstration packages in the Hi-Soft directory at the top right of the CUCD root directory, except Termite, can run directly from the CD. Termite will need to be installed to hard drive. The Twist2-Demo is a demo of the Twist2 database. To activate it click on the Run Demo icon within its drawer. The same goes for DiskMagic, a demo of the top rated directory utility. DiskMagic will need the Setup-DiskMagic icon clicked on before the DiskMAGIC Demo icon. MagicLink-Demo is a demonstration version of a new 3D object converter by Mexon. Again, a simple double-click is all that's required. MagicLink will happily convert between many different types of objects and vice versa. Hand in hand with Magic Link comes the Cinema4D-Demo. Be sure to read the Cinema4D-Tutorial.txt file which also details the features missing from the demonstration version. After running Cinema4D, select Project/Load and pick one of the provided projects to give C4D a spin.

## Misc

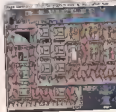
**Contents:** BlitzBasic 2.1 and Dice 3.0 programming language demos, AGA experience CD preview, AIBB benchmarking tool, Digital Universe demo (MUJ) and AmigaVision demo.

This directory contains two complete demo programming environments for Blitz Basic 2 and Dice 3.0, Digital Universe is a demo of an astronomy package similar to Distant Suns and will be reviewed next issue. ImageVision Demo is a demo of a multimedia authoring package from BitSoft also to be reviewed next issue.

The Everybody's Gelfind drawer has a compressed audio sample of David Pleasance ex MD of Commodore UK, playing flamenco guitar on the PureMajima track off the album Everybody's Gelfind.

The AIBB drawer contains the AIBB benchmarking utility. There are lots of modules of various Amiga system benchmarks which can be loaded into AIBB for comparison. The Party\_95 drawer contains a large number of The Party 95 demos, many of which can be run directly but some may need to be copied onto floppies or hard drive. Playing the DataWorld animation is essential but you'll need the right libraries installed.

Lastly, a CD preview of Sadness Software's AGA-Experience CD-ROM is included. To access this simply click on the AGA-Experience icon to open the drawer and then the CLICKME! icon to activate the GUI front end.



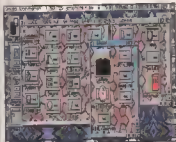


## Comms

**Contents:** Zeus BBS demo, Thor mail and news browser, AWab WWW Browser demo and CU Amiga home page + World of Info CD preview

This directory is dedicated to communications and Internet related material but contains plenty of interest to non modem users. Firstly there's an entire archive of Jason Compton's Amiga Report electronic magazine. You'll find this in the Amiga Report drawer. To view each magazine, simply click on the icons. Next up are a couple of demonstration packages which must be installed to your hard drive. These are the Thor Internet Mail and News browsing software and the Zeus BBS package. In both cases, opening up the windows will reveal an install icon. This will activate the Commodore Installer.

This drawer marked WWW is dedicated to the World Wide

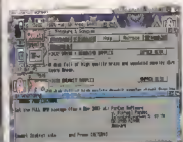


Web. All you need to do to check out this wonderful entity is to open the WWW drawer and click on the AWeb icon. Presuming that you have a GIF datatype installed on your Workbench or you booted from the CD then AWeb should fire up right away and you should see the CU Amiga banner. Then enter the following commands in the AmigaDOS shell, hitting return after each line and being sure to get all the characters correct including spaces:

```
cd cuod:workbench/devs/datatypes/
copy #? Devs:DataTypes/
cd cuod:workbench/classes/datatypes/
copy #? Sys:Classes/DataTypes/
```

After that, reboot your Amiga and try again. AWeb should now activate and display the CU Amiga 'home page' correctly. What you see is similar to AmigaGuide. You can scroll around the page and where any text is in blue, this is a link and you can click on this to move off to that location. Of course AmigaGuide doesn't give you pictures in the page either. We've compiled quite a collection of WWW pages for you to 'surf around' to give a taste of what you could experience with a WWW Browser on the Internet where there are millions of WWW pages all around the world and they can be navigated around in the same easy point and click fashion.

Further down the CU Amiga home page, you'll see a small index. The first link\* is to the documentation for the demo WWW Browser you are using, AWeb. The second is some pages created by CU Amiga Magazine writer John Kennedy. John has included some of his previous articles. The third item is a deceptively small for the material



contained within it's another CD preview but this time it's a CD entirely made up of HTML pages - WWW encyclopedias. Daniel Amor kindly donated the Oceanix pages to give a taste of this useful CD resource. Ordering information is contained in the pages



## 17\_Bit\_PD

**Contents:** 3 massive CD previews of top PD/Shareware collections. 17 Bit Phase 5, Nothing but GIFs and LSD 3.

Using the three 17 Bit Software CD previews is simple. For 17Bit5, just open the directory and double click on the Fifth\_Dimension icon. An AmigaGuide document will appear when you find your way to the listings of files, if the filename is an AmigaGuide button, the archive is present on CUOD and all you need to do is click on it to extract to floppy disk, RAO or any other floppy compatible device.

17BITGIF is a preview of the Nothing But GIFs CD. Simply click on the WELCOM icon. Each directory of pictures has a number of indexes to give you a quick impression of each picture. Just clicking on the index or activate a viewer to display the pictures. As with all the 17 Bit PD CD previews, if the filename is not an AmigaGuide button then the file is not present on CUOD but only on the full CD. Click on the 17bitd if icon in the 17\_Bit\_PD drawer for ordering information on the full version of the CDs.



## Epic

**Contents:** CD previews of Sci-Fi Sensations and Special-FX vol 1.

Within the Epic drawer is a CD Preview of Epic Marketing's Sci-Fi sensations and a preview slideshow of their Special-FX multimedia title. Unfortunately the Sci-Fi Sensations CD preview GUI front and won't work if you don't boot from the CD. This can be solved by performing the following line in the AmigaDOS Shell before activating Sci-Fi Sensations Assign Libs: `CUOD:libs ADD`

Enter this line exactly as shown, complete with all the spaces and hit Return at the end. You can now exit the Shell. After entering the Sci-Fi SENSATIONV2 drawer, you'll need to click on the Click Me 1st icon and then the amiga\_menu. If all has gone according to plan, a GUI interface should appear which will let you move

material and generally just click to view or hear the files.



## Many thanks to ...

Though there's no icon, if you're interested in the trials and tribulations that our cover CD compiler Mat Bettinson went through during the making of CUOD, direct your text viewer to a text file in the root of CUOD called Met.readme. Met would like to thank all the people that provided the material, knowledge and support which enabled CUOD to come into being. CU Amiga Magazine hopes that a cover-mounted CD can become a regular event, so if you have any material for a future CD or some suggestions of what you'd like to see on the next CD, drop us a line. The Gigabyte hard drive is already reformatted for CUOD2. However, we're sure you'll still be discovering hidden wonders on CUOD when the next CD edition of CU Amiga Magazine hits a newsagent near you.



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# cover disks

## How to Load...



This month's "technical" cover disk 130 will not autoboot. To access the programs you will first need to boot from your Workbench disk or your hard drive. See page 9 for instructions on installation and use of the software on disk 130.



### Cover CD

The special CD edition of this month's CU Amiga Magazine comes with a full Amiga CD-ROM instead of floppy disks. Unlike the CD that came with

the November 1995 issue, this CD has been designed to work with all Amigas with a CD-ROM drive and the CD32. You can boot directly from the CD by inserting it into the drive and resting the Amiga or CD32.

### CD32 Notes

While this CD will boot up on a CD32, due to the limited resources of a standard CD32, not all of the software will be compatible. However, much of the software can be run directly from the CD. You will need a mouse and preferably a keyboard to get the most from the CD but you may find you can browse through the contents using the Joypad controller.

### Accessibility

We wanted to make this CD as accessible as possible and so we decided to include most of the software in uncompressed form, ready to run straight from the CD wherever possible. Archives are used in some of the demos of commercial CDs, such as the 17 Bit Phase 5 drawer which contains a number of DMS files that need to be expanded to floppies. However, on the whole you'll find the software is ready to go with no messing around.

Anything you see that has an icon can be run, viewed, played or otherwise accessed by double clicking. In contrast, if you open a drawer and find a list of filenames with no icons, this is because they are data files which need to be loaded into some other application. The icon depicting a disk and three arrows is used for DMS archives. When you double click on these you'll be asked to insert blank disks into the internal floppy drive, onto which the programs will be expanded.

### Hard drive users

If you decide to boot from your hard drive first, remember to double click the InitCD icon in the bottom right corner of the CD window. This will make sure the software knows where to look for all of its support files. Installing the software onto your hard drive is a simple enough job in most cases. If there is no hard drive installation icon for the software you want to install, read the documents in the relevant drawers for clues, and if all else fails, simply copy the contents of the drawer across to your hard drive. You may also need to copy some libraries from the Libs drawer of the CD to the Libs drawer of your hard drive.



### Cover disk 131 Leading Lap

There are both A500 and A1200 versions on this disk. You will need to decompress either version to a separate single disk. This is a simple process. (1) Have a new, blank formatted disk close to hand and turn off your Amiga. (2) Write protect the disk 131 and insert it into the internal drive. (3) Turn on your Amiga and wait until a

CU Amiga loading screen appears. This will have two disk icons on it. (4) Follow the instructions to press either F1 or F2 to decompress either the AGA or standard version on Leading Lap to your blank disk. (5) Once all files have been decompressed onto the blank disk simply restart your machine with this disk in the drive and the game will start. Label this new disk 'Leading Lap SE'. Put disk 131 in a safe place in case of future failure.

### IF YOUR DISK WON'T LOAD

We go to great trouble to ensure that the CU Amiga Magazine cover disks will work on common Amiga models. However, if you do experience problems follow this simple guide. We also vigorously protest about you cover disks on a borrowed drive elsewhere. If name accepts our activities we cannot assume responsibility for it.

1. Remove all unnecessary upgrades and peripherals, such as printers and ratemone. Some computer upgrades can also cause problems.
2. Follow the instructions on this test program jump exactly.
3. If you still experience problems leaving the disk call the PCChip hotline on 01865 356 065 between the hours of 10am and 12noon Monday to Friday.

If that advice that the disk is faulty. We'll send you details to the issue below, and send this issue, along with the faulty cover disk, and a 20p stamped self addressed envelope to:

CU Amiga Magazine Disk Services, PCChip Devs Ltd, Business Park, Evesham, Worcester Ty88L.

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# News

## AT Promises Future



AMIGA

hard drive. Because of its plug-in and go capability he believes that this will appeal to a wider audience than the standard A1200 Magic Pack did. Here's what we asked and what he said:

**■ Q. Why did Amiga Technologies close down the Maidenhead Operation and lose so many staff?**

**■ A.** One thing that was always on the cards was that Maidenhead was going to be temporary. It was always our intention that we would use the strengths of our parent company Escom. Hence the end of January we moved. As far as the redundancies are concerned there are a mixture of things. First, some of the staff would simply not have relocated from Maidenhead to Stanstead, as it is a significant distance to travel. Couple this with the less than expected turnover that we got at Christmas and that's why we didn't bring all the staff here.

**■ Q. Do you think that the Amiga scene in Britain has been affected by the loss of so many staff?**

**■ A.** It's not good for anyone when you lose staff, I accept this. But at the end of the day one has to cut the cloth accordingly. You can see these premises, they're tremendous and I can rely on a lot of help from the [Escom] people here. I still have the back up in Germany, who are beginning to take a more active role in publicity in the UK and we're also going to

do the show, which as you know we're sponsoring. What I'm saying is that we want the Amiga to move forward, we want it to have the desirability it's always had, and if this confidence has been dented slightly, well that's life. But it is my belief that with the excellent features that we've got planned [Surfer Pack, Q-Drive etc] that in the very near future the Amiga will start to get back into the public eye in the very near future, in the manner that we would all like it to be.

**■ Q. Is the UK market still viewed by the parent company as being an important market?**

**■ A.** Yes of course. They have been more proactive in the German market, as you said in your last month's issue, and certainly this paid off there. They're now starting to look at things here in the UK, and are doing the Amiga World Show to help motivate the user base in the UK. We really should be 50/50 with Germany. In real terms 80% of all Amiga business should be done between the UK and Germany, 40% each. By the end of this year this is what we believe we will be able to achieve.

**■ Q. What assurances can you give the UK reader of CU Amiga Magazine that Amiga Technologies isn't retreating from the UK market, that it still has a strong future in the UK?**

**■ A.** One thing is certain. 40% of Amiga Technologies' business can be done in the UK, and any businessman worth his salt would not

want to lose an opportunity like that. It's going to take us time to get back to the dizzy heights though. Let's face it, at Commodore we had eight years of Amiga and that's a long time to develop a product. Irrespective of who's in charge in the UK the guys back in head office in Germany want to see the Amiga succeed here. This commitment will be shown by new products during 1998, like the Q-Drive and Surfer Pack which we are releasing and continued development this year and in 1997.

**■ Q. If Christmas didn't go as well as you expected, how do you view survival this summer?**

**■ A.** Very shortly we will be releasing the Q-Drive. We believe this sort of add on peripheral shows that we are very serious about our machine and this is the right time to launch it. You yourselves are producing a CD-ROM magazine and this proves it. We are also launching the Internet bundle called the Surfer Pack. These are the kind of products that show the strengths of the Amiga. They show its variety and they show its professionalism. We know it's a good games machine, but we also know that it has so much else to offer; and this is the long term message we want to get across.

**■ Q. We've always criticised the relunctant Amiga for not being powerful enough. In between PowerPC and the current machines do you still have plans for an upgraded A1300?**



■ **A** Well, Amiga Technologies in Germany are working towards an A300 based machine. We want to produce an Amiga which falls in between the A200 A1200 and the bigger A4000s. Remember that the arrival date for the PowerPC Amiga is spring 1997, and that's without any slippage (a nice way of saying delayed). No, we want to see the product strengthened and we have plans.

■ **Q** Will it have a CD-ROM drive and Hard Drive?

■ **A** I don't want to give too much information away at the moment because nothing is set in concrete. I would say a hard drive is necessary, and a CD-ROM drive should be an option, as it is with the current A1200. We have big hopes for the Q-Drive, as I have said this is the way the market is developing.

■ **Q** But software developers need to know whether it will have these facilities or not so that they can develop for it.

■ **A** We will renew our efforts to talk to software houses and I personally have already had some positive advances.

■ **Q** When will we see the A4000T in the UK?

■ **A** We had the first significant shipment of A4000T's last week (mid February) into Anglo/SDL. In time we will get more fluid supplies. I don't know all the reasons for its delay but one of them certainly is the CE mark. I know they had to make a few minor tweaks

to get the machine to conform to the EC's new strict regulations (CE stands for controlled emissions). As of 1st of January all new products sold in the European Community must conform to very strict radiation emission standards. These apply to all peripherals attachable to the machine as well as the unit itself. The testing is expensive and lengthy. Because the A4000T was largely US developed, this had to be undergone before it could be sold here.

## Silent Paws Update Oh Lordy! Its Valhalla 3

If you saw our article on the Silent PAWS Laptop Amiga in the February 1996 issue and were interested, then the World Of Amiga show in Novotel on April 13th, 14th could be the place to go. Sources in America have claimed that Shawn Ralph, the machine's developer is hoping to demonstrate one of the prototypes here in the UK during the show to gauge potential in Europe. If this is the case it will be the first time the machine has been displayed outside North America since its inception. Although expensive, it does provide Amiga on the move capability. The A1200 version of the computer seemed bulky from the photos we saw. The A600 version was much more PC laptop in size. As far as we can see the best way forward for this machine has to be to go as small as possible. This means either a custom motherboard has to be designed or, in the short term, to possibly use the comparatively tiny CD32 motherboard, with an SX32 (see page 68) daughterboard. This is what we'll be putting to Silent PAWS if they turn up. Why not join us?

## A World of New Kit



The World Of Amiga show in April seems set to be the launch pad for a whole range of new Amiga products.

Not only will Amiga Technologies have their Surf Pack and the Q-Drive on display (let alone last), they'll hopefully also have the first UK A4000T's and possibly news on PowerPC and the new Workbench.

From other developers the news is just as good with HiSoft working like mad to display their Surf Squirrel and Squirrel MPEG. Both of these are set to take the Amiga by storm like HiSoft's original Squirrel did last year. HiSoft will also be demonstrating

the Terminator TCP (which has Met Batson in a sweat alibi) and add ons for the superb Cinema 4D from Maxon.

Also displaying new products including last month's highly rated Wordworth 5, will be Digital. Digital will have the cut down SE version of WW5 on display for Amigas with just 2Mb and a single disk drive, alongside Organiser 2 and Datastore 2.

The Organisers of World Of Amiga haven't got a full list of exhibitors for the show just yet, but Power Computing, Silica, Harwood's and other hardware retailers and developers are all expected to take part.

Booking for the show is available on the following phone numbers: 01389 706348.

For more information see the advertisement on page 95.

We'd like to wish the show all the support it deserves. We intend to be there, so we hope to meet you there. Let's keep the Amiga alive and support this show.

"It's a bird", "It's a plane", "It's a door", egg! These samples again! The notorious Valhalla series with its high and low pitched sample voices, its hoars in the floor and its none too logical puzzles was a source of constant amusement, despair and argument here in the office. You either loved the game or hated it - there was no middle ground. But enough people out there must have loved the original and its follow-up The Lord Of Infinity, because a new version, Valhalla And The Fortress Of Eve is on its way.

The game will follow the fortunes of the young prince of the original game and promises more of the same in terms of gameplay and even more

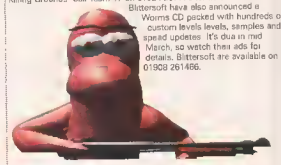
sampled text. Indeed, for those sick of the samples Vulcan is now incorporating a full text only option. The new game will be sold at Vulcan's good value direct-from-publisher Mini Series price of £14.99. Contact Vulcan Software on 01705 670269.



## Worms, Worms and More Worms

Team 17 have announced that they intend doing an AGA upgrade for Worms to take advantage of the A1200's superior graphics display system. It will be more colourful and the variety of levels will be greater than in the original version. Although the game engine will remain the same the update disks will fall into the £15 bracket and so will still be top value for Worms nuts we reckon. It's due to arrive around the end of March, at the same time as Alien Breed 3DII. The Killing Grounds. Call Team 17 on 01924 267776 for more details.

Blittersoft have also announced a Worms CD packed with hundreds of custom levels, levels, samples and spread updates. It's due in mid March, so watch their ads for details. Blittersoft are available on 01908 261466.





# Blittersoft Go Hard

Blittersoft have announced a new range of hardware and software products for the Spring. These include new tower casings for the A500, A1200, A3000 and A4000 ranges. Equipped with Zorro II and III, PCI slots and other expansion features they will pitch in competition with both the Micronik Tower and Hi-Q's Power Stations (see page 77), for expanding users' existing systems. Because of the provision of PCI slots Blittersoft are claiming that PC boards will be available for the tower systems giving you both an Amiga and a PC in the one case, unlike Hi-Q's Sennese Twin system which uses a separate standalone PC and SCSI unit connected via a Squirrel to a standard A1200.

Blittersoft have also announced that they've taken over the distribution of Canadian company AsimWare's Innovations CD-ROM software. The products concerned are AsimCDF5 3.0, a control program for CD-ROM drives with PhotoCD, music control and sampling and CD32/CDTV emulation and MasterISO - an Amiga specific CD-ROM mastering program. Call Blittersoft on 01908 261466.

## Guildhall Educational NFA Reply

Guildhall Leisure has taken over distribution of 10 out of 10 Educational software. 10 out of 10 produce educational products for both Amiga disk and CD-ROM for ages 3-16. These include subjects like Maths, History, Geography and a narrow range of languages including French, German and, of course, English. Up to date national curriculum is claimed. For more information contact Guildhall Leisure on 01632 890000.



## PageStream 2.2SE

Emerald are doing an offer on PageStream 2.2SE which makes it available for £49.95. Those not already equipped with this superb package should investigate it now.

Upgrades to version 3.0 from this version will be available soon. Emerald can be contacted on 0181 715 8868.

## NFA Reply

Last month on Public Domain utilities page we ran an article on some suspected pirate numbers and BBSes on a disk that we'd received from NFA and asked them to contact us. We promptly received a phone call from NFA and asked them to send in their reply so here it is.

"I'm sorry you feel NFA are a bunch of pirates. Due to the article you wrote the morale of several members of the group has been seriously damaged.

"The vast majority of NFA members are very much against piracy. These will always be a pirate element in a group no matter how hard you try to keep it clean.

"We do not promote pirate BBS sites. These may be members in the group who are currently trading pirate software. If there are I would ask them to contact our UK HQ for a chat.

Since publication of your article I have received several calls from people trying to obtain 'war3' from our main distribution site.

"The best thing I need sitting on my hard drive in the morning is copyright material.

"I really do not have a lot more to say on the subject. I will be extra careful in future, as when I checked my system there were several archives with cracked keyfiles that I had not checked properly (which were promptly removed). All I can say is that we do try to keep the group legal and will continue to do so. Signed NFA management.

# Stateside

The North American scene of late has been one of cautious optimism, with the Amiga Atlanta 10th Anniversary Banquet as a high and the shutdown of a large Amiga company a low. Let me explain... writes **Jason Compton**

The Amiga Atlanta user group's party brought Amigans from across the country to the Terrace Garden Inn in fashionable Buckhead, Atlanta, Georgia. The meal was standard-issue banquet chicken but the conversation was all Amiga. The banquet brought in fides from the group's past and present, just as it brought in luminaries from the Amiga's history Dale Luck and RJ Mical from the original Amiga Corporation kept the audience entertained with tales of the design of the original chips, the legendary joystick that spawned Guru Meditation, and their own experiences with Commodore. Legends of the industry Dave Haynie and Fred Fish addressed the crowd on their exploits, and I myself was asked to give a piece on the Amiga's future. But there wasn't anything I could say that the audience couldn't see for themselves, particularly when you take into account who was in the audience.

Motorola sent a PR contingent, complete with a PowerPC604 machine (running Windows NT, but they were at least fairly polite about this) and loads of consumer and developer goodies to give away. Newtack also sent close to a dozen people, including company president Tim Jensen, who capped off the evening with a rallying speech about the future of the Amiga and his personal confidence in Amiga Technologies' management.

The future isn't what it used to be for Canada's Wonder Computers, who as you may recall from our last issue had just come off of two store openings in the summer and the successful World of Amiga Toronto shop. Unfortunately Wonder's accounts were called in by their bank and the company is presently in bankruptcy proceedings. It is the hope of Wonder CEO Mark Habinski that he will be able to raise enough capital to re-purchase the assets from the bankrupt Wonder and form a new corporation. While the North American market itself will be able to sustain the [at best] still in Wonder's operations and would survive [at worst] its failure to return, it has been a blow to customers who relied on their service, as well as retailers who not only relied on their business, but have considerable accounts and merchandise behind Wonder's locked doors.

In the face of AmiTCP's recent move to commercialism and the release of Net 225 and its subsequent bundling with Amiga Technologies' Surferpack, Oregon Research is moving ahead with its plans to release a competing networking system. Dubbed Terminate TCP after their popular terminal program, Terminate's release date and price are as yet unknown. At the same time, US-headquartered developers, Omnipress, seem to be close to sealing a publishing deal for their BrowseWeb browsing software. While a firm statement was not available at the time of press, latest reports from Omnipress management indicate that HiSoft of the UK will get the nod.

## 25p A Megabyte

As well as announcing that they will be selling the SX32, Eyetech of North Yorkshire are currently promoting a hard drive and multimedia authoring kit based around Optonica's MME Experience kit. The Hard Drive is a slimline 3.5 inch unit that Eyetech claim will need no modifications to the standard A1200 to install. It's a 1.083 Gigabytes (over 1000Mb) model and should be enough for most multimedia applications. The drive, an

multitask registered copy of MME and other shareware and PD utilities comes at £229.95. For more information contact Eyetech on 01842 713165.





Matt Broughton's



# Games in view

**H**ello and welcome. Now you may remember me threatening to ghost at you following a recent trip to New York but considering the fact that it rained and snowed for the entire time it hardly seems worth it. You'll no doubt also be glad to hear that on returning from my trip, I contracted pneumonia and spent the following weeks locked in a small room with only a large duvet for company. Still, at least I'm alive.

Let's start with some positive stuff. Time I feel to catch up with the game that I've been looking forward to since before we sold *The One* (grr, grrr!) Yes, *Blitz Bombers* is still on its way, and bearing a bit of legal "calm down, calm down!" between the *Leading Edge* boys and "another company" — who are a bit worried about the similarity between *Blitz Bombers* and one of their major titles — it should be with us within the next two months.

The company in question aren't actually being very difficult at all, and with any luck, the most I'll mean to the final game will be a possible change to the look of the main "bomber" character.

Another interesting twist to the tale (according to "Mr PhD" himself, Dr Nigel Hughes) is that one of the gang recently found a load of music on an Amine CD that they'd previously been presented by THEIR musical man under the pretence of it being his original work! I know — some people will try anything! Still, a couple of the actual composers have already been contacted and it looks as though the end result of this particular problem will just involve writing a couple of new laval tunes.

Other than that, everything has come along wonderfully since we last looked with a one-player game element having been implemented, where each level has a "goal" as well as bad-dies to kill. It's all pretty simple

**Same old picture I'm afraid, but that's what happens when you go off on holiday and it snows continually. Still, at least I had the Amiga games scans to look forward to on my return.**

stuff like collecting keys and finding the exit, but should add to the longevity as a single-player game.

Future projects from the boys also look pretty interesting, with a decent 3D *Blitz Bomber* engine already doing the rounds — giving the game we know and love a more *Gloom*-like perspective.

One problem with this has come from not being able to see bombs around corners, but the team are hoping to compensate for this with clever use of lighting effects to "give the bombs away" as well as the possibility of being able to see the tops of bombs from a distance. Interesting stuff, non?

The only other major foreseeable problem is that, while a split-screen is possible, there's no way we can expect a four-way cut. This will probably lead to further developments in the one-player game design.

And finally from the boys, having written so many *Blitz* applications for themselves during the writing of *Blitz Bombers*, there's a now a good chance that they'll be making some of their programmes available to the public. Look out for *Blitz* support software in the near future.

Even more good news? Do you remember *Legends*? If you don't let me recap: *Krisella* planned to release this promising RPG but shelved. Well, it looks like *Guldball Leisure* will be releasing it soon. So we've got that to look forward to.

Another snippet of good news is that despite the recent disappearance of softco *Resputin* top-up platformer *Ruffian* will still be getting a release — albeit one through mail order — complete with a couple of tweaks such as new and improved

music, improved level designs and the facility to customise the main controls. Hurrah.

There is a demo of the updated version of *Ruffian* on the CD-ROM covermounted on the CD edition of this magazine. So if you have the CD-ROM edition cheers, if not you'll have to wait a bit.

Some sad news though. This week, however, sad news concerning *21st Century*. Yes, though we've been seeing each other for quite some while now, the spark has gone to some of our relationship, and they've just rung to say that they need a bit of time and space to think things over.

My gut feeling, however, is that they're about to chuck us. So it's back down the games disco to try and pick up a new chick, but at least there's still *Slem Tilt* to look forward to before the big heave-ho.

It would appear that the only games we're likely to see from the 21st-ers in the future would be budget releases of old games — and even that would

more likely than not be processed through an affiliated label such as *Hit Squad* or *KIDXX*. Still we'll wait and see. How many times have we heard that from companies only for them to come back onto the games scene with an Amiga game just a few months later?

A particularly unfortunate bit of news this month, comes from long-time Amiga supporters, *Kompet*, where the loss of the *Blue Byte* label (early last year) appears to have done more damage in the long run than they realised, with the company going into voluntary liquidation.

*Kompet* have provided extremely important to the Amiga's game scene over the past year, especially with its publishing arm, *Black Legend*, who managed a number of European developers and ultimately brought us such hits as *Tactical Manager* and *Football Glory*.

And there you have it — just time to glance at the HMV charts before turning into a pizza. Be seeing you. ■

Matt Broughton

## HMV GAMES Amiga Top 10

NO	TITLE	PUBLISHER
1	Serial World of Soccer 95/96	Virgin
2	Worms	Ocean
3	Player Manager 2: Extra Time	Virgin
4	Alien Breed 2	Ocean
5	Super Stardust	Ocean
6	Project X	Ocean
7	Kid Chaos	Ocean
8	Fantasy Manager 95/96	Hit Squad
9	Ultimate Soccer Manager	Daze
10	PGA European Tour Golf	Electronic Arts



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# OUTBRE

## PROTECT YOUR AMIGA FROM THE NEW THREAT OF VIRUS ATTACK

**With new technology comes a new threat from viruses. We explore just how big is the problem, how has new technology affected its penetration of the Amiga market and how to protect against it ...**

### What is a virus?

For those new to, or unfamiliar with the term, don't panic. A virus is not alive, it's only a computer program. However, that's not to say it's not dangerous - or even that it doesn't exhibit life-like symptoms. For example, like a real life virus, a virus computer program replicates itself at every opportunity, writing copies of itself to every disk it comes into contact with. Each of these copies is the same as the original, and will continue to try spreading like wildfire.

Some viruses hide in the boot sectors of floppy disks. The boot sectors are special because when the Amiga is reset and a floppy disk present, it automatically loads in these boot sectors and runs the data they contain as a program. Normally this program triggers the loading of the Workbench or loads a game, but if a virus is stored there, it will be loaded into memory and executed. As the Amiga is an excellent multitasking system it can lurk for ages, waiting for a new disk to be inserted so it can copy itself to its bootsector. This is how they spread.

If the newly inserted disk is a game with a custom bootblock, the virus can overwrite it and therefore make the

**Y**es, we know, viruses are a new threat to Amiga users. But the amount of damage they caused was largely limited. A hard reset would solve most problems on a floppy disk based system as the viruses could only thrive on disk or in RAM. Now though, hard drives are increasingly commonplace. CD-ROMs come with 650Mb of files and the 'net is a gigantic breeding ground. The amount of damage to be caused has multiplied.

A virus can be a big problem, or it can be an insignificant one. In a worst case scenario, it can destroy your software collection, re-format your hard drive and even potentially damage a video monitor. Plenty of scare stories abound and newspapers love to run half fact half myth stories and this high tech scourge is ideal press fodder.

Although viruses were big news on Amiga some years ago it's now other systems that are being targeted. Even Bill Gates' new 'safe' operating system Windows '95 was soon at risk suddenly word processing documents began to act independently and databases lost their data.



# WAK!

game useless

Unfortunately a virus can do even more damage - some are programmed to perform various nasty acts after a certain amount of time. Some viruses will corrupt or format a hard disk for example, some will put up irritating messages on the screen or make the mouse pointer vanish

## A bit sneaky

Some strains of virus don't require booting though and can sneak into your system in various other ways. Some disguise themselves as normal programs in your c: directory, some misuse the operating system's disk validation system.

The most common way in which viruses used to be spread was through pirated games and demo disks - disks which needed to be booted. Often, users would perform a warm reset (Control-Amiga-Amiga) after loading a demo or game and

then pop

in a disk to do something else - instant infection. It has also been known for a virus to pop up on magazine cover disks. I was caught out once with the Saddam virus when compiling a disk for an Amiga magazine (not this title, of course) about four years ago. It was an unpleasant experience. I can promise you

## On the 'net

With the rise and rise of comms in general and the Internet in particular the opportunities for viruses to spread is ever greater. The Amnet is the definitive Amiga software site on the Internet - if you upload a program there, it can be used by thousands of users all over the world in hours. Needless to say that the keepers of Amnet make stringent anti-virus tests. Bulletin Boards are an

excellent source of software, but can also be potential risks. Many boards cater for a variety of machines, and many are run on a PC. The PC sysops may not have the tools at his disposal to check Amiga format uploads for nasty extras, so be extra careful when using download programs. DMS files are risky, as they contain a snapshot of an entire disk, including the bootblock data

## On disks

CU Amiga Magazine tests its disks thoroughly with Anti Virus software every month and it's just as well. Although people who supply us with software for disks have no idea whatsoever that they are carrying a virus, some of them do. This is easily controlled with standard disks, though you do have to make sure that you have proper up to date software to check for brand new viruses. But with CD-ROMs it can turn into a nightmare. Although Matt checked the contents of this month's CD-ROM (see special edition magazines) as each component was put on the disc, when it was fully compiled another check revealed two viruses - 'Ebola' and 'Happy New Year 1998'

VirusChecker, the program Matt normally uses to check for them did not discover these, but after having some minor problems with various files he checked the disc with Virus Z, (on this month's disk) and there they were. At this stage they had infected several hundred files, multiplying like wildfire. Virus Z located and recovered most of the files, clearing up the infection.

Luckily Ebola and Happy New Year 1998 are not dangerous, they are not intended to do any harm, only to irritate the egos of their creators. But because of the way they were programmed they caused hang ups or gurus in some of the items on the disk.

However they could have been worse. The trick is to use the most up-to-date software and even try running your disks through more than one virus checker, just to make sure. It's a timely coincidence that we were running this feature at exactly the same time as we discovered these viruses, we're always vigilant with our disks and haven't had any problems for nearly a year before this

## Good news

The good news is that clearly, the virus threat has diminished from a few years ago, when every magazine Q&A postbag was full of distraught users asking why their disks had been re-named 'Lazarus' (a perfect example of how a non-existent virus got the blame). Raising the awareness of users and good anti-virus tools have made a difference and virus related disasters are

What they say:

'Personally I have only once caught two viruses and these were both before I was on the net. However, having said that, I normally always have the latest version of

VirusChecker running in the background, unless I do a minimum boot, which is usually only to run LightWave, and definitely no Net access, as Rexx and Amintop are not started either. I think most legitimate ftp sites run careful checks on all uploaded software, amidst certainly does.

Laurie  
(A Usenet user)

'The only problem I have had with a virus was when my parents brought back some pirated software from Singapore. It was a Saddam virus which was fairly easy to get rid of with VirusChecker. I tend not to rush off and get the latest version of a software release as soon as it appears and I also limit myself to Amnet. I know that corrupted software has appeared on Amnet but they seem to be pretty good at removing it when it's pointed out to them.'

Ken  
(A Usenet user)

## Free love, Safe Hex

Safe Hex International (SHI) are an international group, dedicated to trying to stop the spread of computer viruses. In their own words, SHI is a grass roots movement, started in 1987 with Amiga computers. Today they are an organisation with around 600 members, who are all more or less involved with the project. It's a non-profit making organisation and their motto is 'Safe Hex'. The facilities they provide include a virus bane containing more than 1800 Amiga and PC viruses for supporting good shareware antivirus programs (helping people get money lost by virus infection back by programming anti virus products) and releasing the newest and the best virus killers around from well known programmers worldwide. There are more than 35 PC and Amiga 'Virus Casters' worldwide where you can get virus help by phoning their Hotline, or by contacting them on the SHI World Wide Web site at <http://www.sai-borgae.dk/~11g/SHI.HTM>





relatively uncommon today

In a perverse way the lack of new Amiga viruses can actually be seen to be a bad sign about the state of the Amiga. No-one is praising virus programmers, but the fact that most have turned their attentions to the PC is indicative that the Amiga is not as hip as it once was. Let's just hope that when things start rolling again we will leave virus writers behind.

Don't get complacent though. As mass storage media and the net take off on the Amiga (it's the threat is still ever present. As 'Happy New Year 96' proves there are still people out there programming them. An even bigger threat lurks on old disks and untested programs from BBS systems. It can only take one virus on a disk you forgot to test to infect your entire collection, and potentially wipe out years of work. Be vigilant!

## How to prevent an attack

The best cure is not to catch a virus in the first place and the only way to be safe is to leave your Amiga switched off and never insert a new floppy disk in the drive or use a modem. But hey, it's not an overstatement! Everybody uses disks and e-mail use modems, so here are some handy hints for safer use.

• Don't touch proofed software. Not only is pirating software illegal and damaging to the Amiga market as a

## Recommended anti-virus programs

These programs make use of the specialist SMI anti-virus libraries, and are therefore recommended. You can obtain them from the Aminet (either the Internet version, the CD-Roms or any BBS which keeps the CD-Roms on-line) or from public domain libraries.

Virus Checker by Johan Veldhuis  
Virus Scanner by Gabriele Giaco  
Fides Professional by John Lohmayer  
Fides Checker by John Lohmayer  
DMS by Michael Pandey, ParCon Software  
D-Copy by Stefan Bernbo  
X-Copy by Cachet Software (commercial)  
Disk Auto Copy by Alchemy Software.  
Xtruder (a BBS!) virus killer by Martin Wulffeld  
Harboot virus analyzer by Martin Harbo  
Bootwriter by Ralf Thanner  
MT-Copy by Gert-Jan Strik

whole, but it is the prime way in which viruses are spread.

• Use the most up-to-date Virus software you can find. Use it frequently. If you have a hard drive, keep it running all the time.

• Be especially careful about using public domain or shareware software you have downloaded yourself. Test the files with a virus checker.

• When using a hard drive you may want to deactivate it when using software you are wary of. You can do this from the boot-up menu (hold down the two mouse buttons).

• Make regular back-ups. Be careful to make several generations of back-ups in case you unwittingly back up

infected files and overwrite your older (but uninfected) back-up.

• Keep the virus protect tabs on your floppies open to stop anything writing to your disks without your knowledge.

• Switch your Amiga off between games and keep the power off for at least 30 seconds to make sure nothing is left lurking in memory.

• If you use electronic mail, beware of warning messages about certain viruses (for example, Good Times) asking you to spread the word. In this case it's the idea of the warning message itself which is the virus as it is spread around the world by warned users keen to warn their friends. ■

John Kennedy

## What they say:

Chris Wiles of Active Software (CD retailer and 'net enthusiast)

**Q** Are Amiga viruses as big a worry as they were?

**A** Not really - the 'hype' or worry that surfaced with virus problems has died in the last two years. Beginners and new users always worry, however. They imagine that a virus has entered a disk when they encounter a problem - be it a read/write error, non-dos disk or simply the fact that a program is not installed correctly.

There is very little chance of finding a virus. Probably about one in every 1000 disks you bought may have a virus, maybe less.

Despite general opinions, major Public Domain libraries are usually very virus-free. Simply because programs are checked by BBSes, the Internet, subscribers and then the library that receives them.

There are two ways of preventing virus attack: 1. Always keep your write-protect tab UP on a floppy disk 2. Keep a virus checker in your WBSStartup drawer on bootup

**Q** Has the Internet made any difference?

**A** There are very few virus problems on the Aminet - not sure about the Internet in general. The guys behind the Aminet and the Aminet CD (and, indeed most CD's!) check and double-check every file for every kind of virus. There will be problems on the Internet - but if you take the recommended precautions - you will be safe.

**Q** Does newer virus mean that the Amiga is doing badly as a computer?

**A** I think that the Amiga has had it's day from virus makers. Most are corrupt individuals who like to attack the masses. They target business users, console makers etc. I believe 'they' would love to get a uncontrollable virus into a console game, mass market PC game etc. - once it has installed to your hard drive then the destruction starts.

The Amiga is much more an enthusiasts model at the moment. In

the future this may change with the 're-invention' of the OS and main CPU (RISC), but for now PC is the target.

**Q** Have CD-ROM compilation made the threat of viruses better or worse?

**A** Surprisingly a mixture of both. Better as there is generally much more control. As stated before, the Aminet CD's (as an example) are tested and re-tested for viruses, so the chance of finding a virus on one of those CD's will be minimal. It has made it worse due to the fact there are SO many files present on the CD and therefore increases the chance of finding a virus.

For instance, if a company decided to throw together a games CD in record time (ie started in August for October release) they will not have time to test the CD properly never mind test and re-test for viruses. That could be a worry.

There are many smaller companies trying to jump on the CD bandwagon as quickly as possible - my message is just make sure you CD's are as free from viruses as possible

Here are some examples of viruses on Amiga

ABCAEK/Odia-CC

W/MicroMaster

AIDS

HVAI/Alan

New Best

ASS Virus Protector

Bamiga

Sector

Belgium

BGS9

BGS9-Mutant

Big Boss/Blackflash

Blade Runners

BLFBlizzard

Butonic

Byte Bandit

ErrorByte

Parasite

Byte Parasite

Byte Voyager

Byte Warrior

CCCP

Centurion

Centurion

Dani/Destructor

Dirty Tricks

Disaster Master

Disaster

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Sinister Syndicate

Logo

StarFire/NorthStar

Australian Parasite

The Ineognito

Warren X-Copy



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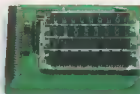
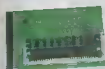
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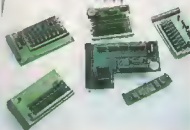
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# Wallace &

in

## The right computer

**W**hat do the Crunchies Ad, Frank the Tortoise and the superb Wallace and Gromit animations all have in common? Apart from the fact that they all came from the Aardman Animations stable, they were all done on the Amiga. Not a lot of people know that. We spoke to Glenn Hall, Aardman Animations' Technical Director to find out more.

**It is the Animator's first choice. We will stay with the Amiga just as long as we can keep them going.**

**Nick Park's latest Wallace and Gromit animation has won yet another host of awards. The Amiga helped make it possible. (We're so proud.)**

**Q. When did you get involved in work on the Wallace and Gromit series?**

**A.** In 1986 Nick Park, had joined Aardman from the National Film School, and was trying to get his film finished. Peter Lord and David Sproston, far sighted folk that they are, let Nick finish his film in the studios. It took another three years, and in the end A Grand Day Out was finished, and subsequently got an Oscar nomination. That year, also brought the studio its first Oscar for Creature Comforts.

**Q. What role does Nick Park have in putting his work together and does he have much**

**influence over your work in the making of the Wallace and Gromit films?**

**A.** In the production of the recent film A Close Shave Nick led a whole team of animators. He wrote the script with Bob Baker the Bristol based writer who famously invented KB in Dr Who, and drew the storyboard. He oversaw every single model, animated a huge amount of it all himself and spent loads of precious time helping the other animators to get the look of the film the same all the way through. For Nick it is total involvement, and I as long as I have known and worked with him, I have never known him loose his cool. He is a great guy to work for, and when he and Peter Lord work together, really exciting things happen.

Yes he has influence in the same way that all the animators in the studio do. It is very important that the equipment and ways of working are driven by the animators themselves, so I spend a lot of time finding out what they want, and how they want it to work, then we try to make it happen.





# st Gromit



also fit in ISA BUS PC, this connects via its own CVE cable (component video exchange) to the PAR card itself. The capture card has excellent quality video, can handle composite, S video and beta video. A full set of processor chips gives total control over the signal and the PAR is connected directly to an associated hard disc which can support two IDE drives. This system can thus grab video in real time, store it in full colour and give immediate replay. Handily, the software control can support single frame grabbing, and this is the mode we use.

The hard bit for us came when Commodore hit problems. We have bought every new system we could get our hands on, and a few second-hand, including an old A3000 that

## ■ Q. So what equipment do you use these?

■ A. We use Amiga 4000s with 230Mb HDD and 6Mb RAM. We also use Microvitec 1439 monitors and have standardised them for all our computers including PCs and some Apple Macintoshes. The crucial piece of equipment is the Personal Animation Recorder from Digital Processing Systems. We also use Directory Opus and Sunrise 19.

Also, we've modified the Panasonic AVE series frame by fitting our own set of remote controls, the Digipod. These allow the controls to be very robust so they can be actually placed on the set.

## ■ Q. Why did you decide to use Amigas?

■ A. After testing various systems, we found that the DPS Personal Animation Recorder on the Amiga worked best for us. It has its origins as a render store for LightWave and the new Tek toaster, and as such was a unique combination. It was very cost effective and available. Before we chose the PAR we also tried out similar products on the Mac. We had the very first Digital Film from SuperMac Technologies and we also bought a Radius Video Vision studio, which we still use and have just updated. The PAR is different as it is essentially a hardware product, and

the video system sits entirely above the computer bus. This means that the attached PAL video monitor gives a full screen picture. We use two cards both from DPS. The first is a capture card AD 350, which usefully will

## Who the hell does Glenn Hall think he is? A right Aardman

Many thanks to Glenn Hall who after several attempts to avoid being blown up whilst attending recent Government programme in London took time out to answer these questions.

So how did he get involved in all of this? "I started in electronic engineering, working mainly in theatre and television lighting and control systems, including the first computer controlled lighting systems. This took me into the area of working in manufacturing and designing lighting equipment, and thus into process control for theatre and manufacturing. Around this time I was lucky enough to work on feature film special effects, including some Pink Panther films. 1980 brought me to Bristol, where I joined the Drama Department at University of Bristol, where I taught stage lighting and theatre crafts, and there one day I met David Sproston from Aardman Animations. I was doing a fair amount of freelance work then, including film work and Aardman made a commercial, their first, featuring dancing bones to make a computer keyboard. They rented the University theatre in the long summer

breath to shoot the commercial. I got involved and this led to my working on the seminal pop video for Peter Gabriel, Sledgehammer. Believe it or not that was shot in six days, with the added angle scenes shot at the university theatre. After that I joined Aardman full time in 1986, with a brief to extend the use of motion control and computer in the film making process. Next up was the creation of the famous skeleton for the Scotch Video Tape, which saw Aardman working with Bill Mather, who went on amongst other wondrous spots, to create those dancing milk bottles."

The programme Glenn was attending, Information Society Initiative, is being set up by the government to help small and medium sized companies get the best benefits from the new IT and trading on a World Wide Web. The government have put £35 million behind this and Aardman Animations is featured as one of the five case studies to show how IT has worked for them. We will be doing a feature on this soon, meanwhile you can find out more on <http://www.isi.gov.uk>





still does good duty. We also have a few that are PC based – we had to do this when we just couldn't get any Amigas.

**■ Q. How does an animation get from being just an idea to an animated picture?**

**■ A.** Well it starts off with a script and then taking that script through to a storyboard. We look at the ideas to see how it can be done. When the storyboard is done and has been agreed upon with the advertising agency (if it is a commercial), then the modelmakers and set builders start work. The technical team begin work on special rigs to hold the models, or to move pieces. Sometimes I make computer controlled systems to link the whole thing together. Most of our work involves motion control, using computer based systems to move the camera, and this has to be done in small sections. Extra systems, often based around Toshiba PLCs (Programmable Logic Controllers) are used to keep everything in synch.

A voice track is recorded and this is broken down into phonetics by a film editor. The animators use this as a guide to get the lip synch right. The camera department assembles all the equipment and tests it, then the camera assistant on the job will do a final film test on the set before the shoot starts properly.

**■ Q. When does the Amiga come in?**

**■ A.** We set up a model and view it with a Mitchell 35mm camera which is fitted with CCD video assist. We grab a single frame into a Panasonic frame store then grab a frame into the PAR. Then we move the model and compare the frame using the digital frame store, so you can mix between the current frame being worked on and the last frame shot. If it is OK on the video screen, we take a PAR frame and then play the sequence out the PAR in real time. If all that is OK then we take the frame on film and do it all again and again and again 25 times per second of finished film. This mostly takes around 10 to 12 minutes per frame.

**■ Q. Will you stick with the Amiga in future?**

**■ A.** It is the animators' first choice. Until very recently, when DPS brought out a new version the Perception Video Recorder that runs with Windows NT, it remains the essential tool for us. We will stay with the Amiga just as long as we can keep them going.

**■ Q. What future projects do you have lined up?**

## Oscar, oscar

Aardman Animations was formed in 1972, by two schoolkids David Sproxton and Peter Lord. Their home made animations were spotted by a BBC TV producer who promptly gave them a spot on *Video On*. From here they developed the unforgettable *Morph* series. The company grew and grew and, now based in Bristol, has won numerous awards. There are too many to mention here but some of its most noted successes include the *Crutches*, *Crunchie* and *Sledgehammer* videos, *Lurpak* and (little ones with trombones) and the infamous *Wallace and Gromit* series: *A Grand Day Out*, *The Wrong Trousers* and *A Close Shave*. At the recent BAFTA awards, held in London in February of this year, *A Close Shave* was a host of awards including: best film over fifteen minutes, best animation, public choice award for favourite film and public choice award for funniest film.

**■ A.** All sorts really. Nowadays there is too much work for one person, so the whole team work together. With many projects either shooting or in development at the same time, it is

**After testing various systems, we found that the DPS Personal Animation Recorder on Amiga worked best for us.**

all a lot of work, and we have a great deal of fun putting it all together. We also get a lot of visitors, and we try to spend time with college students, and even on the phone to help budding animators where we can.

**■ Lisa Collier**











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# ScreenScene



It's all gone a bit pear shaped at the moment as you will see from the vast, dark empty spaces opposite. We find ourselves sandwiched in between Christmas and Easter with this issue and thus our games pages may be described as at best sparse, at worst rather empty.

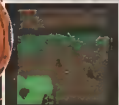
But we're not complaining. We did get an exclusive look at one of the hottest games of the year, now in the final throes of development: Chaos Engine 2, while Lisa travelled to the snowy south west for an exploratory visit to the bustling development basement of Intersect Developments. She came back goggle eyed. Find out why on page 42.

Watchtower is the lead review this month and by all accounts it's a decent shoot 'em up in the Commando mould, though its looks are definitely all Chaos Engine. World Golf is a miniature Sensible Golf, if such a thing were possible while Premier Manager 3 Deluxe updates an already good game. There's also all the usual tips and cheats in Vamp and Snip Tips with the added bonus of Zeewolf 2 help.

News just in from Time Warner Interactive should please SWOS fans: they are doing a special offer on the 95/96 edition of the game. Basically if you've bought the first version you can upgrade to the current season's one for £9.99, postage inclusive. All TWI asks you to do is provide proof of original purchase by sending them the bar code from the old Sensible World Of Soccer box along with a cheque or postal order for the above amount made out to Time Warner Interactive. Make sure to include your full name, address and postcode printed clearly, otherwise you'll never get your game! Send these to Time Warner Interactive, Customer Service SWOS Offer, 2 Carriage Row, 183 Eversholt Street, London NW1 1BU. Then enjoy your game.

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# The Chaos Engine 2

■ Due: May ■ Developer: The Bitmap Brothers ■ Publisher: TWI ☎ 0171 391 4300

**M**I and Mrs Bitmap must have had very active bedtimes in the sixties and seventies. I counted at least 16 young men in their office, mostly around the same age. This puts most Catholic families to shame in my opinion. To name but a few, there was Simon Bitmap, Steve and his brother Steve Bitmap, Mark Bitmap, Richard Bitmap, even their sister Abi Bitmap. And these are just the brothers working on Chaos Engine 2. Sister Abi set up my interview.

But I jest. They are not in fact related at all. Despite my disappointment on this score I had a good chat with Chaos Engine's figurehead, the inimitable, and folioliarily challenged, Simon Knight. Bitmap Brothers' Colonel Saunders without the beard. To my immense surprise, when I arrived in The Bitmap's Wapping office for my exclusive demo and interview, Simon was showing it to somebody else! Another magazine? Had I been cheated? No, some geezer had just walked in off the street and they thought he was Alan Dykes. Haven't they heard it's dangerous to talk to strangers these days (much less an Irishman)?

The Chaos Engine 2 was first revealed in Spring 1995. Before this there were only rumours that a new version was being done,

**Is your life too calm, too peaceful, too bloomin' boring, in fact. You need some excitement, what you want is a bit of chaos to shake things up. Well, you could get it sooner than you think...**

but the first one was so successful a follow up was inevitable. The plot of the game revolves around a chap called the Baron's quest for the Chaos Engine, the machine at the heart of the first game, which got blown up and spread to the four parts of time. Now the Baron wants it back in one piece and he has hired mercenaries to do the job for him.

In the first game two player mode was a cooperative affair, fighting side by side to defeat the enemy. Even in one player mode you had assistance from the computer who played the second character for you. In this game however the emphasis is on competition. The screen is horizontally split which means that each character can operate totally independently. The idea is to collect pieces of the Baron's puzzle kill as many baddies as possible

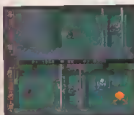


and make it to the end of the level first. The key to the change in emphasis is that you actively try to kill the other character and steal their keys etc, to defeat them. Each level has to have one winner.

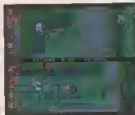
This can be done in two player

mode or as a single player. In the latter form you can retain the split screen, in which case you'll be able to see the other character's movements, or else return to the old style single screen. The computer characters have their own advanced intelligence and the Bitmaps claim that this will adapt to the experience and style of each individual human player.

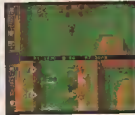
The team working on Chaos 2 includes Simon himself who is the game designer, Steve Kelly who has done most of the in-game programming Mark Vice and Dave Trevelyan who have programmed the intelligence for the computer controlled characters, Steve Cargill who has been doing support and systems programming, Richard Joseph who



▲ Both screens operate independently, allowing one player to see what the other is up to.



▲ Not only does the other character have improved AI, the scenery is top class.



▲ Here, as in the first level the Baron's key just has been found and has lost all its belongings.





A Brigand beats Raven in all out war shocker! Is either one or two players made the object in its best war opponent in the end.

was contracted from outside to do the music and SPX, Gary Carr who did the monster sprites art work and Dan Malone who did the backgrounds and main characters. It's been in development for nearly two years now, so we asked Simon and Steve Kelly how they were getting along.

**Alan: What is the object of the game?**

**Simon:** 'The object of the game is to succeed to the detriment of the other players, in all aspects, in solving puzzles in winning the levels, in getting more experience.'

**Alan: How complicated has the AI become?**

**Simon:** 'The original system we devised works quite well, but the hardest thing is to create a consistent challenge. It is very easy to make him intelligent so that he can win every time because he knows the level, the hardest thing is to make him play in a responsive way to make it fun even for players that aren't really good.'

**Alan: It looks similar to number one, what are the big differences?**

**Simon:** 'The graphics are similar, we've used the same viewpoint and it's based around the same characters but there are now more animation frames for each character and the bodies have all been updated too. But the game has changed a lot, it's changed in pace, it's changed in objective, apart from the visuals there aren't many similarities at all.'

**Alan: As a you still enjoying programming on the Amiga or**

**are the Bitmaps deserting the Amiga like so many others?**

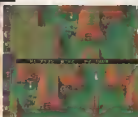
**Simon:** 'This project is something new, something out of the ordinary and it is nice to do this on a machine you're familiar with. This allows you to experiment much more in terms of the game engine and intelligence. You're not spending your time learning how to control the equipment; you're actually spending your time developing the game, which is what we really wanted to do. Also, when we started it was at the point when there wasn't really a clear path, so we're happy finishing things off here and we're certainly enjoying it. We have looked into doing Z on the Amiga [the Bitmap's current PC product], obviously it's



quite difficult because there's a lot going on in Z and it was designed as a PC game from the outset. Basically this really depends on the state of the market.

**Alan: If you had to recommend a specification for the new Amiga, that would allow you to produce more games, what would it be?**

**Steve:** 'More memory, decent sized internal hard disk and a faster processor. With something like Chaos engine 2 an accelerator doesn't help at all, but with a



project like Z it would be necessary. We've been developing Chaos Engine 2 on the A1200, but there is an A500 version in development to, although this is lagging behind. It looks a bit different because of the graphics, but the gameplay and speed are very similar to the A1200 version.

**Alan: What didn't you like about the scientist? Why have you cut the game down to four characters?**

**Simon:** 'The decision was mostly made by Dan, based on the graphics, I mean the scientist/preacher was an obvious one to go because of the similarities. Basically though we needed the space because of all the extra animation frames, we needed all the memory available just to use four characters. Also, in terms of providing a real difference between them it's very difficult to get the intelligence right so that they all play differently. Doing four enabled us to give them very different playing styles.'



**Alan: What are you programming it in?**

**Steve:** 'In a mixture of C and assembler. Rob Tieveley who did the intelligence for Speedball 2 and for Chaos Engine on the SNES programmed it for us on this one, using C but creating a language of its own which the rest of us could then use and modify.'

The version I saw was very near completion. We played through two of the four worlds, Aztek and Future world, and the graphics were great looking. The new sprite animations are pretty impressive too and the split screen system worked well. In total there will be five levels on each world and each has very specific features and enemies. I'm pretty excited about The Chaos Engine 2, so hopefully we'll have a review for you next month!'

**Alan Dykes**



A As you progress through Chaos 2, your character goes up there.



A Simon Kelly, Steve Kelly, and Rob Kelly trying not to look like brothers.



# Intersected Development

**Problem: no good Amiga games around. Solution: make your own. That's what these guys did ...**

**W**ouldn't have one [a PC] in the house," laughed Intersect Development's Frank Tout at the suggestion that he might have used PCs at some point whilst working on their current store of Amiga games. Dedicated Amiga enthusiasts this two man team (the other half being Trevor Mansah) prides itself on only using Amigas for all its work. Intersect Development are an inspiration in these slightly

murky times for the Amiga games market. First because they only use Amigas to produce quality games and second because their loyalty to the Amiga is self evident as they are determined not to let it die. So we were only too delighted despite the bitter weather, to take our chances on British Rail and travel down to their Torquay office (ie, home) to see what they had lined up.

We're not talking multi-national software company set up with Intersect Development, but they still produce the goods anyway. The set up is simple. Frank works, on his

**A. Here are some exclusive shots of the later levels of Atrophy. © Amiga Wargames always gets there first.**

A1200 from his flat in Torquay while Intersect's other half, Trevor, works on the code in Liverpool where he is currently studying computing. They exchange ideas and material via mail, which is how they met originally. Frank, who has been with Commodore since the C64 days, started corresponding with Trevor when he wrote to him to get the source code for a game that he'd written for AmigaNuts.

## Games galore

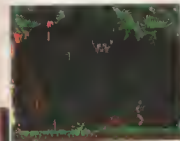
The first project we were shown was Atrophy. You may remember that we previewed this scrolling shoot 'em up in Merch and were impressed by what we saw. It was interesting, therefore to see how it had developed in the later stages. The scrolling shoot 'em up, which will have six levels when finished, is now nearing completion. All it's waiting on is a tidy up on the collision detection front. Obviously proud of the game, Franks states that "What we like about it [Atrophy] is that it is so smooth everything happens at 50 fifty frames a second compared to other games which, invariably happen at 25."

Next up, we were given a sneak preview of another game

which is in the latter stages of development: Tilly A puzzle game which will comprise of a massive 100 levels and an editor so when you

exhaust these you can start on your own. It looks fairly basic, a little spherical cheppy races around a maze set up, teleporting here there and everywhere in a bid to collect 88 munny pick-ups (the usual sort treasure chest, pieces of fruit, cuddly toys, OK maybe not) as possible.

The four other games we talked about: Neyok, Phasic Distortion, Alternate Futures and Dominions are currently in the early stages of development. Neyok and Alternate Futures will both be sci-fi based platform games. Neyok, Frank says will be "somewhere along the lines of Shadow of the Beast". It is actually New York in a future world where the earth has been wiped after nuclear burn out and it's up to the hero to leap through these "hugo" platforms to save the world. Alternate Futures continues along the same vein, only the story centres around a scientist getting lost



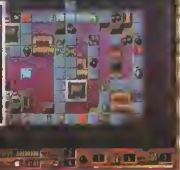
**A. Neyok's title screen was rendered in Lightforce and the screenshot done? It's a picture here. Sorry folks.**





in his time machine and being transported back in time rather than forward. Phasic Distortion, a triple playfield, eight-way shooter, is back to a maze/puzzle-type setup where you have to race around collecting prototypes. Finally Dominions, with 256-hires graphics, is a move towards RPGs: It will be a series of three point-and-click games featuring a hero called Gary Somerton caught in a "no man's land".

All these games will be AGA only as Incentised feel that they couldn't achieve the same quality on non AGA machines.



▲ Tilly is looking like it will be finished before Atrophy. However, there isn't a publisher for it yet.



▲ Tilly will have a 100 levels and just when you thought you'd finished there's no order to make any more.

## How do they do that?

How you might ask do two men, one based in Liverpool, the other Torquay manage to keep ideas and productivity going? It's quite simple really, according to Frank. "It's all thanks to the unique game engine we have developed which makes it simple to get a game idea into action. The engine is central to everything we do, we

wrote a game around it because it can do what we want without taking up too much time."

So what other software do they use? LightWave, DPaint, and Personal Paint are used for the graphics and ProTracker for the sound. Tony Horgan pealed at the suggestion that someone should use something other than OctaMED though. Frank replies that: "A guy called Lee Smith did all the music for Atrophy using

ProTracker. OctaMED is too slow for playing back, we couldn't have put it in the game as it takes too much time and we'd end up having glitches and stuff like that."

We left Frank furiously working away on getting Atrophy and Tilly finished so we should a review copies very soon. At the time of going to press OTM hope to Atrophy on the shelf by April. ■

Lee Collins

# Slamtilt Pinball

■ Due: March ■ Publisher: 21st Century  
Entertainment ☎ 01235 851852

Is there something about Scandinavia that encourages great pinball games on computers? Unless I'm greatly mistaken they are not very well known for their pinball tables. But, considering how cold it gets up there, and how expensive pub drinks are it's perhaps not surprising they don't go out. What was surprising though was that 21st Century and Digital Illusions parted company after three very successful games. 21st then linked up with a company called Spidersoft to do Pinball Mania. This was bundled with the Magic pack but looked unfinished, unpolished and generally disappointing.

It was with much relief then that Helen from 21st popped



into the office a couple of weeks ago with Slamtilt. Four tables from Scandinavia yes, but not from Digital Illusions. The new programmers are Liquid Design and by the look of these tables, they've matched, if not surpassed Illusion's mastery.

The four tables are based around Demons, Space, Mean Machines and Pirates and the sheer quality of the graphics matches Pinball Illusions.

This game is much deeper and faster than Pinball Mania was, but added to the table-top wizardry are some very comprehensive animations and gorgeous



sub games. High scores and much of the gameplay revolves around reading this animation panel and using its features. This

appears to go much further than any other pinball game I've seen before. But I haven't had an

opportunity to test it for more than an hour, so I can't comment on the difficulty or effectiveness of this approach at the moment.

Of course it could be argued that there are enough Pinball

games on Amiga already, surely there's only so many variations you can have on a theme? OK, so how many platform games have there been? Cess tested.

I just hope that Slamtilt lives up to the promise it showed in this preview, if it does it should appeal not only to the hardened pinball player but to anyone interested in a good, new playable arcade game. We'll find out next month. ■

AD



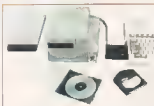
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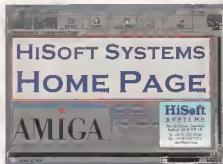
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# Watchtower

■ Price: £25.95 ■ Publisher: OTM © 01827 312302

If you wanted tips on the following game, just try the age-old advice "If it moves, shoot it". This would also be a good time to find a friend, 'cause you're gonna need as much help as you can get!

**U**pon loading Watchtower, the immediate thought that springs to mind is "Cwar, this don't 'arf look like Cheos Engine!" – and quite rightly so. The graphics certainly owe more than just a passing nod to the Renegade classic. However, after a few minutes playing you realise that Watchtower's contents is more akin to elderly titles such as Commando and Rembo, not to mention the Sensi Classic, Cannon Fodder

The game's creators have mercifully spared us a twenty page plot, instead opting for the more easily digestible "You're the enemy army in its entirety" theme – and before you know it, you're off up the screen armed only with a pea-shooter and a handful of grenades.

The game itself is split into six missions, each with a different objective and a different setting



▲ Collect any unaccounted score for some extra points.

(ag desert, enemy base, urban). The truth, however, is that the game play is pretty much unchanged throughout, with only graphical changes and the odd new enemy type making the different levels identifiable. Whether you're on level two or five, you can bet your granny's spare teeth that most of your time will be spent shooting hostile enemy soldiers and blowing up installations, tanks, aircraft, and... well, pretty much anything that it react to a well



placed grenade really. The aforementioned explosive applies come in limited supply, so crates and boxes must be blown open along the way as you search for fresh supplies and point-rewarding items. The programmers have obviously spent time perfecting their explosion

graphics – and very nice they are too – but this is more than just a special effect, as it can also be exploited by the player. How? Well let's just say that any enemy units near exploding items, er... 'fly away to meet their maker'. Hurrah!

## Guns, guns, and more guns

As previously mentioned, the player starts off with a full complement of grenades (the maximum allowed being nine) and the standard issue pistol, namely the Desert Eagle Magnum 44. Unfortunately, this has a fairly low damage rating, a pretty pathetic range and a limited rate of fire so you'll need to find some crates as soon as possible and blow them apart in the hope of finding a better weapon. There are a number of guns to be found, but due to weight, only one type of gun can be carried at any point. It is therefore down to the player to



▲ I realise that most of our readers don't even talk to humans, but if you've got a mate, why not play the two-player game?

become familiar with each gun's attributes and on-screen appearance so that you don't accidentally swap, for instance, an M80 machine gun – with excellent range and rate of fire – for a rocket launcher that while having the best range possible, can only fire one rocket at a time.

Other toys to play with include AK-47 Kalashnikov, Israeli UZI Sub-Machine gun, M16 Assault Rifle, Minigun, and a Flame Thrower with continuous flame and high damage – girl! Of course, as well-armed as you are, you can expect to encounter enemy soldiers with the same level of weaponry as yourself, and what with you starting each new mission back with the pistol, well, let's just say that complacency isn't advisable.

As well as engaging enemy troops you can also expect to come up against some fairly serious military hardware in the form of tanks, supply trucks, and even bombers that fly across



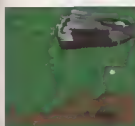




**A** Before each mission you're shown your position on the overall campaign world map, along with a truncated label (he kill everything!)

the screen dropping their deadly payload right on the old noddle. Fortunately, careful retoning of the ever-popular grenades will ensure that you're always in a position to reply to such challenges in kind.

The level designs are well thought out, so ambushes are frequent enough to keep the player on his toes, while narrow inlets to mention well protected bridges call for some sharp shooting.



## Reap the many rewards

As you progress through the missions your performance is evaluated, and if you've been a good boy, you could even find yourself being awarded with a nice badge or even a shiny medal. How does a Legion of Ment grab you? Or perhaps a Medal of Honor, a Silver Star, a Bronze Star, a

United Nations Medal. One to avoid, however, is the Purple Heart as this is generally only awarded to those who have died as a result of standing in front of enemy snipers shouting "come and get it big boy". You can also impress your friends and family with promotions throughout the campaign - right through from Private to Brigadier General.



**A** Honor? I'm great I am.

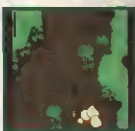
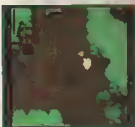
skills. As well as a large number of obstacles that can be blown to clear a path, there are also buildings and installations that must be worked around as the screen scrolls slowly to reveal new areas on the map. As if that wasn't enough, later levels are covered in land mines, but thanks to the fact that many of the enemy soldiers are not only single-minded but pretty damn thick, they can be tricked into clearing routes through such deadly grounds (and a very good impression of chopped tomatoes they do too!).

## And the final verdict is...?

To be honest, as simplistic as Watchtower is, it's actually pretty good fun. It's certainly the 'old school' as far as game play goes - but as long as it's still fun, who cares? The companions to Chaos Engine may really go as far as the presentation, the fact that you can have two players trundling around at the same time, and the graphical representation of the extremely questionable coms that appear throughout the game as point bonuses. Other than that, it's all very basic in as much as you just wade through the levels killing everything that crosses your path.

At times the screen can get a tad crowded, as large numbers of soldiers all appear at once, adding to the on-screen confusion with bullets spraying in all directions (though I'm sure you'll be glad to know that only once in my entire testing sessions did I encounter any slowdown). The only other comment worth noting with the screen is that you have to sometimes wait for the scrolling to catch up with your position, otherwise you'll be standing on the edge of the screen just as a new soldier appears, which is - needless to say - a bit of a git.

The choice of weapons is impressive, although once you get yourself a decent weapon with a good range and



**A** Moving these crates has revealed exactly what the factor ordered - more grenades!

fair damage, there's no real need to swap around. As for the grenades, well, they're great! I would say, though, that due to the game's general difficulty (ie bloody hard for the most part!) a few more grenades wouldn't have gone amiss.

And that's about it really. The three difficulty levels don't appear to do much more than make the soldiers tougher (not in intelligence, but where one bullet would suffice on the easy level, you'll need two for the medium level) while the six levels are progressively more busy and generally nastier. As for whether you're getting twenty six quid's worth of value, well, that's really down to how much you personally go for 'braad and butter' arcade games. My personal advice would be to give Watchtower a go, because while it ain't Earth-shattering, it's not at all bad. ■

**Matt Bronghton**

### WATCHTOWER

- watchtower version.....3.0
- number of disks.....3
- RAM.....2MB
- hard disk installation.....yes

graphics.....	70%
sound.....	60%
playability.....	75%
playability.....	75%

**OVERALL**  
A tad basic, but pretty entertaining.

**78%**



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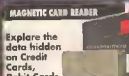
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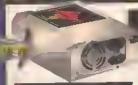
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# Premier Manager 3 Deluxe

■ Price: £T8A ■ Publisher: Gremlin ☎ 081 988 8888

**G**remlin's Premier Manager series has been on the go for donkeys years and is one of the most popular footy games ever. We haven't seen anything from this Sheffield based software house for nearly a year now so a parcel thus post marked and obviously filled with a box created a bit of a stir. The last name they sent us was Premier

Manager 3 Multi Edit, a support program for the PM3 series. Just what could this be?

Not to be outdone by SWOS, Player Manager and Ultimate Soccer Manager Premier Manager 3 has had the latest teams and league structures bolted on to bring it bang up to date with the 1995/1996 season. The basic game remains the same though and they've been good enough to

supply the original manual. In fact the packaging is pretty comprehensive it's nice to see that Gremlin aren't trying to do what is definitely, possibly, maybe their last Amiga game on the cheap though the fact that they claim to have sold over half a million of the various versions of this one program so far may have something to do with this too.

The Multi Edit software

released last year is included in this version too. This means you're getting two programs. The Multi Edit is not a data or update disk, it is designed to operate separately, creating save games for the full program. This it does well allowing you to create your own scenarios and even edit the on-screen text and messages.

Premier Manager 3 stands the test of time. As a comprehensive football management sim it is still one of our office favourites, alongside On The Ball and Ultimate. When originally launched we felt that it was a little too like PM2 for comfort, and if anyone took our advice at that stage then now might be the time to upgrade as the Multi Editor does make this package more interesting. The only problem marking this game is the fact that Gremlin have supplied it to us with no fixed price. If someone sells it for under £20 and you've

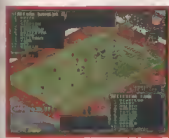


the mood for an upgrade it's good value. At £25 or more you might do well to wait and see if Domark's Championship Manager 2, the only genuinely new sim on the way, has the necessary oomph to tackle you by the short and curly. ■

AD

GAME  
VALUE  
+  
STYLING  
+  
SOUND  
+  
GRAPHICS

83%



# World Golf

■ Price: £14.99 ■ Publisher: Apex Systems ☎ see text

**Q**uote of the month "I played the cover disk demos of Sensible Golf, and frankly, I wasn't impressed." So writes Mr David Kirk of Apex Systems. Of course, the difference between Mr Kirk and most unimpressed readers, is that he actually did something about it - he went and wrote his own version. Oh yes.

It is indeed true, for here before us we find World Cup, an

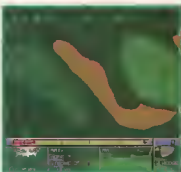
interesting little offering that comes courtesy of mail order only for the bargain price of £15. There are five famous courses to choose from (Castle Pines, Genesieles, Little Aston, Muirfield Village and Wentworth), 63 individually skilled computer opponents to challenge, and the option of up to four human players. There's also an auto-caddy option, where the computer points you in the right direction and selects the correct club for you.

The game format is nothing particularly new with the good old power-bar making an appearance, on the whole, it all holds together well. The presentation is nice and clear, the sound effects are as effective as I guess it's possible to be with a big empty field, and everything works as well as you'd expect. It's just that it's a bit unremarkable.

The graphics are simple, but

don't really offer the player much in the way of reward, while the gameplay is a bit too basic to warrant any stinging comment. It really is just a straight forward cross between Sensi Golf and the millions of other golf games we've seen over the past few years.

Because it's so plain, there's nothing to rave over and, similarly, nothing to really moan about. The only possible complaint (and where perhaps Mr Kirk should have a look at Sensi) is that the scale doesn't change when you get onto the green, making accurate targeting and power selection a lot less controllable. There's also a problem when, if you are right by the hole but technically off the green, it defaults to irons, leaving you to misjudge and bonk the ball over the other side again (and I don't remember golf



balls bouncing like ping pong balls either).

As for Mr Kirk saying that he made this game because he was disappointed with Sensi: well I think it's a people in glass houses' situation. Should you fancy a copy of World Golf you'll want to send £14.99 to Apex Systems, 8 Gosling Gate Road, Goldthorpe, Rotherham South Yorkshire S81 9LU. ■

ME

GAME  
VALUE  
+  
STYLING  
+  
SOUND  
+  
GRAPHICS

62%







She's mean, moody and magnificent and knows more about things that go 'bump' in the night than she should. If you are at your wits end with an adventure problem turn to Vampyra for help.

## Dungeon Master II

I am having trouble getting the lost clan piece from the revolving table in the castle between the spooky trees. Each time I go near the table it revolves and moves the piece to the opposite side of the table. How can I get to it?

Jim Lavex, Hatfield

Would it help if I pointed out that this table is like all the tables which you found in the shops? Think back to how you got the table in the shop to revolve and give your what the shopkeeper had placed at his side? Stupid boy!

## Maniac Mansion

I have a walk through guide for Maniac Mansion and all was going well until a said 'walk to the hatch in the man-eating plant room and use the plant to climb into the room above'. After this I was to use the telescope in the room above but I can't get through the hatch as the plant stops me. Could you put me out of my misery?

Craig Ashton, Leicester.

# Adventure Helpline

*You've walk-through was probably written by the same person who wrote the recipe for Dragon Stew. It says, 'first catch and kill a dragon'. The trick is to first make the plant grow by using a jar of pool water on it. Next use a can of Pepsi on it to kill it stone dead.*

## Police Quest II

I'm stuck in Cotton Cove with my partner Keith and Officer Golepsi. There is also a girl present and I've talked to her about the blood. I would like to know how to get past Bains who appears from nowhere when I go up river. When I get killed I get the message: 'make sure sights are set properly and aim gun at the target.' What does this mean?

K. Dodd, Park Village.

*We'll you are suffering from one of two options. Either you couldn't hit a cow's bum with a banjo while holding its tail or the sights on your gun need adjusting. Let's be charitable and guess that you haven't been to the shooting range today and adjusted your sights. In fact I'll bet a sloppy kiss to a pint of your blood that that's the answer to your problem. In this game you must go to the shooting range every day and save carefully reset your sights or you will die later on.*

## Operation Stealth

I bought Operation Stealth two months ago and I'm finding it extremely difficult. I have passed through the four labyrinths and have ended up stuck in an office. I have no clue what I'm going to do next. I have a little box, a watch, an electric razor, an electric cable and a pan. Can you help me?

Alexandre Valerio, Portugal.

*I'd assume that you are in the*

*Palace. If this is true and you are in the office with the statue, then your next move is to 'operate' the arm of the statue to reveal a safe. You can now use the little box on the safe, and operate the on/off button to switch it on. Operate the up and down arrows and the first light on the box illuminates. Operate the validation button on the safe. Operate the up and down buttons until the second light on the box lights up. (Do this again for the third and fourth numbers). Operate the on/off switch on the box to switch off and take it. Operate the validation button on the safe again and it will open.*

## Drakkhen

I have the eight tears from the Drakkhen Princes and Princesses but there is mention of a ninth hidden tear. Where is it?

Alan Goodridge, Bamsley.

*I cannot tell I lie, I don't know. Maybe a reader could help if they knew. However, I do know quite a few clever tricks for this game, so I thought at least I would help you as much as I could. When you create a character and it asks for a name use 31415927-Return. Now type SUPERVISOR-Return. Continue as normal and you will get a very powerful character. Once you have done this you can pre-empt F10 during the game and your Magic and Hit Points will go to maximum. Even better, press and hold F9 while you right-click at the bottom of the dialogue window. This calls up Supervisor mode. You can now summon any monster by 'clicking' in their names but I wouldn't recommend that! Release F9, press and hold F8 while you again click in the same place and your character will be miraculously changed into a super-hero. A bit like me really.*

## Monkey Island II

I need help to get a map piece which I believe is under the cottage on the small island off Platt

Island but the bloke upstairs is giving me a grog that makes me incapacitated. I have tried emptying my mug on the tree but the guy keeps refilling it with his own. I can't think how to win this so-called competition. Please help?

C. Dutton, Clwyd.

*If I had a penny for each time someone tried to get me 'incapacitated' by forcing me to drink too much I would be a rich girl. Hoppily it's me who usually end up drinking from the 'mugs' who try. The trick is not to let the guys realise that you have an empty glass, because they just fill it up again. What you must do is empty your mug on the tree, then quickly fill it up with near-grog which isn't alcoholic.*

## Simon The Sorcerer

Can you tell me how to pick up the woodworms so I can get the stuff?

Lauren Eames, Gillingham.

*You don't pick up the woodworms. You foolish child, you talk to them and they tell you things. Which reminds me, do you know why gods are called birds? Because they pick up worms.*

If you've got a little problem with your favourite Role Playing Game and would like Vamp to help you out, drop her a line at CU Amiga Magazine, Priority Court, 30-32 Farrington Lane, London EC1R 3AU.



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# Snip tips



Poor Matt hasn't been very well this month, but he's dragged his limp and lifeless body into the office (where he fits in nicely in that condition) just for all you needy readers

## RoadKill A1200

### Guildhall Leisure

Richard Donnellan from Oldham has found a way to make an easy billion or so in this top racing game. Get a password code such as **LQPONTULXI** (this will get you into the second scenario) and switch the sixth and seventh letters. For example, **LQPONTULXI** will now become **LQPONTULXI**. Enter the new password and you should complete level 2-1 with around \$4,000,000,000. You can also try this out with the other password codes - although it works with some and not others.

## Zeewolf 2

### Binary Asylum

The up to date stuff is now flooding in thick and fast and J Mc Mahon from Lanarkshire starts us off with level codes for this top flight sim.

Mission	Code
2	Reguin
3	Wolf Fram
4	Fullmoon
6	Ouxagan
6	Stag
17	Kesken
14	Station
16	OSULL
11	STAFPAUSE
20	DO IT NOW

And Chris Hends, Shropshire also helps out with even more level codes for Zeewolf 2

23	SHIFDECK
24	GLOBOTT



▲ Up to the minute cheats for us up to the minute game Zeewolf 2, you see! My prayers are answered

25	SEHAIVE
28	SHADOW
29	MAX FUEL
30	FELPAY
31	DOMINO
32	STEEDART

## Alien Breed 3D

### Team 17

"Not enough of the recent stuff eh?" writes Mick Slingsby of Leicester as he defiantly sends us in his level codes for Alien Breed 3D. Thank you Mick and thanks also to Darren White for his help. Anyway here they are

Level 2	CMOFTJENFRETTTT
Level 3	MTQOEDQOFTTTTT
Level 4	KPKOFOORKEFTTT
Level 5	MLANDOOERFTTT
Level 6	FOIIMPOCOTTTTT
Level 7	CCOIGDOFTTTTT
Level 8	PPKOLGKFAAMEOKD
Level 9	LKKGELPFAAMEOKD
Level 10	SMAGHMLPFAAMEOKD
Level 11	HCIGGMLPFAAMEOKD
Level 12	LNTICOLPFAAMEOKD
Level 13	OLNIOFFKFAAMEOKD
Level 14	SOIGLAKPFAAMEOKD
Level 15	LKKOFKFAAMEOKD
Level 16	CHAKPPKFAAMEOKD

## Streetfighter II

### US Gold

Select a one-player game and position the selection box over Blanka but DO NOT press fire. Instead slowly type the word **FATIENCE** and you should hear a digitised voice say

"Cheat Now select your character and start the game. Note that you do not have to choose Blanka as your fighter"



When fighting press F10 at any point during the game to replenish all your energy. Also pause the game and type 7KIDS to be able to play a two-player game against a friend as the same character. Well done Mr Mark Wadham from Cornwall. Incidentally, does anyone remember the old game that used the cheat 7KIDS? Hmm

## Lotus Esprit Turbo Challenge

### Gremlin

Mr Wadham once again provides the bread. Enter the following names in a two-player race for automatic qualifying

- 1) FIELDS OF FIRE
- 2) IN A BIG COUNTRY

Also, for a hidden sub-game enter these two names

- 1) MONSTER
- 2) SEVENTEEN

## k240

### Gremlin

On the main asteroid screen press the return key and type in 'Loadsedash' pressing the return key after it for a small sum of money. This can be used as many times as you like to amount to a large sum of money. Cheers to Mark Draper, Stockport for that

## Road Race

### Electronic Arts

Mark Wadham, strikes gain. Just type in the following code to receive \$7,815,000

00001 04310 M00FC 1777M

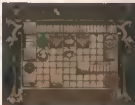
## Worms

### Team 17

Here are few tips from David Minnis, Humberdale for that all time favourite game involving hermaphrodites with weapons

### Sheep mode:

Type **TOTAL N0RMAGE** (two words) on the main screen and



▲ Short the talking game in level two, then and then in the structure from below.



▲ This game needs an introduction - and we've got a checklist of cheats for it.

you get a banana bomb, three sheep and a minigun to start with

### Secret moves:

Stand next to a worm (not your own) and then press away, away, towards, towards then do a prod and you get a secret move

**Two versus two mode:** Select your four players then select two of them again (they get circles instead of stars) you are now ready to play team worms

### Changing friction and gravity on custom screen mode:

The standard file name for a custom map is 'GAME - WGY Z . WGY' where W=gravity (1-5), x=friction (1-5) and y and z are sea and colours, respectively

## Valhalla: Before The War

### Vulcan Software

Here's a few level codes from Linda Soul, Cricklewood, to keep you going

2) FUMEL 3) SOMAL 4) SAMOL



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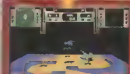
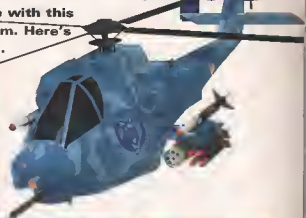


# Zeewolf 2 tips

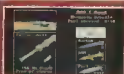
Some people have been having trouble with this great helicopter sim from Binary Asylum. Here's a guide to the first really difficult level.

LEVEL 10

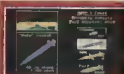
Like Cannon Fodder, Zeewolf 2 is not all about flying through each mission blazing away like a madman (or woman). Your Zeewolf becomes increasingly vulnerable on later levels as enemy weapons systems get more sophisticated and ammo levels are low to start with. Level 10 is a case in point. Zeewolf 2 has a staggered difficulty level which leads you into the game with a false sense of security. When you hit level 10 it seems like a dead end for a while; until you get the hang of how to do things in the right order. Although you start off with what seems like nowhere near enough ammo to finish the mission, if you use enemy fire the right way you will find plenty of surprises under the domes.



**10-1** Ready for lift off. Go left to the small island and collect the shells and missiles from the Camel team. This should get you worried; there's only 17 shells and one missile! Now fly right to the main island and, whatever you do, do not waste a shell on anything. If you are attacked, lose them. You cannot afford to spend any ammo at this point.



**10-4** Now land on the other side of the Dome, just ahead in his sights. He will continue to attempt to shoot you but the Dome is in the way, so he'll blow it up first. It only takes 20 or so shells to destroy a Bear so as soon as the Dome blows up take off, destroy him and then land and pick up 400 or so shells from the Camel.



**10-2** It's a good idea to leave some ammo behind; if you get shot down you will still be able to go back and get more. Otherwise you're back to 50 shells and you haven't a hope in hell of finishing the level. Now destroy the domes in the bottom left and bottom right hand corner of the base. These will reveal more ammunition.



**10-3** Shoot up some of the floors with your Zeewolf, but use the Pelican to shoot out the doors of each building, releasing the soldiers. Then load 'em up and airlift 'em to the carrier. If you have ammo left in the Pelican fly northwards from the carrier and cause as much damage to the air base as possible. Zeewolf should then still be well armed and ready to kill.



**10-5** Although the mission involves picking up troops from damaged buildings there are rather a lot of them so you'll want to use the Pelican, not your Zeewolf. The surroundings are too dangerous at first as you've got to take out the base's defenses, especially the three AA emplacements on the edges of the island. First though scavenge for more ammo.



**10-6** The only way to stock up on ammo is to blow up the green domes on the four corners beside the high rise buildings, but you don't have enough firepower to destroy even one. The trick is to use the enemy. The Camel under the top right dome contains 500 shells. Go and buzz the Bear guarding it and get him to shoot at you.



**10-7** The dome in the top left corner is also partially protected by the four missile emplacements so, although the method is the same, you have to be careful of fire from both sides. Also this Bear seems reluctant to destroy the dome, but persevere and don't use too much ammo. The helicopter base you've got to destroy to complete the mission will need loads.



**10-8** Now take out the three missile emplacements at low level with several salvos of missiles and guns blazing. YOU DO NOT want to get caught in any crossfire from these, they will take either chopper down in three seconds. If you're feeling lucky you could get these emplacements to knock out a few floors of the nearest skyscraper for you.











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# Get Serious

What's in store in this month's serious reviews section? Let our technical editor reveal all. (No, thanks - ED)

## Horgan's Organ



In terms of hardware and software reviews, this month, there's a

definite swing towards sound and music this month, with a no-nonsense test of the Toccata 16-bit sound card, a preview of OctoMED SoundStudio (the review will be along shortly) and Aural Synthetica to boot!

There's plenty of healthy activity in other areas too, with the SX32 CD32 upgrade, a new video title in the shape of

Limelight Tyro and another solution for A1280 owners with big ideas in the shape of HIQ's Power Station.

Only last month I was getting all dewey eyed about the lack of innovation on the PD demo scene, when what should turn up but a corking batch of audio-visual weirdness from The Party '95 demo competition. This competition was held on December 95 in Denmark and demo creators around the world entered theirs in a bid to see whose was the best! You'll find a selection of the best of these on the CD edition of this month's magazine, including the amazing 80Mb Dataworld extravaganza (yes, 80Mb!). It feels good to be able to indulge in the sort of luxuries a cover-mounted CD allows!

All this, plus an extra large CD-ROM roundup. Enjoy!

Tony Morgan  
Technical Editor



Toccata 16-bit

## Toccata

**62**

Given the chance, who wouldn't upgrade their Amiga to full CD quality 16-bit audio space? Toccata offers exactly that. Can it pull it off?

## SX32

**66**

With all that power under the bonnet of a CD32 it seems a shame to reduce it to a games machine. With the SX32 you can transform it into a virtual A1200.

## OctoMED SoundStudio 69

Bringing the state-of-the-tracker art into a new era, OctoMED SoundStudio could be the best thing to happen to Amiga audio. Find out more in our exclusive preview.

## Aural Synthetica

**70**

From the developer of Aural Illusion, Aural Synthetica is a complete modular synthesiser system for your Amiga. All the fun of analogue synths without the cables!

## Limelight Tyro

**72**

There are times when the all singing multimedia package is just too complex for your simple video titling requirements. It's time for Limelight Tyro.

## HIQ Power Station

**77**

Face it, the A1200 isn't exactly well endowed when it comes to drive bays and SCSI support. The Power Station offers a possible solution.

## CD-ROM round up

**78**

You want CD-ROM reviews? You got 'em! Three pages of the latest releases, with everything from sound samples to software archives start on page 79.

## PD Scena

**83**

Starring the best bits from The Party '95 demo competition, PD Scena also has plenty to offer the cash-strapped Amiga gamer.

## PD Utilities

**87**

A real diverse bunch of tools and miscellaneous bits are on offer in this month's bargain bucket that's commonly known as PD Utilities.





# Toccata

■ Price: £299 ■ Developer: MacroSystem ☎+49 2302 949490

■ Supplier: White Knight Technology ☎01902 822 321

**I**t's been the dream of many Amiga users that one day they their beloved Paula chip will be superseded by some state of the art audio hardware with a minimum of 16 bit bandwidth to play with, perhaps even 24 or 32 bits. Until that dream becomes reality there will be a place for third party audio upgrades, such as Toccata from German developer MacroSystem.

## Digital video

Toccata is a card for all Amigas with Zorro slots running OS 2 and above. It can sample and replay a single channel of 16-bit stereo digital audio at frequencies up to 48KHz, working from Fast RAM or directly from a hard drive (or any device with a fast enough transfer rate, such as a Zip). It's been designed for use in multi-media and audio mastering work in which case the card acts as a digital recorder, rather than a sampler in a musical context. Specifically it hooks up to

**Give your Amiga the luxury of 16-bit audio with a nice new Zorro card.**

MacroSystem's V-Lab Motion video card to create a complete digital video editing system.

## Ins and outs

There are four inputs and one output on the board. The rear panel has three 6.5mm stereo jack sockets, two of which are line level inputs, the remaining one is the line level output. Located on the inside edge of the card are two 3.5mm jack sockets, one set up for line level input, the other for mic input. There's an option to mix the input with the Toccata output. The idea behind this is that you can have your Amiga's standard audio channels piped

through the card, so you don't need a mixer. The relative levels of the channels can be controlled from a software mixing desk.

## Supplied software

Two disks of software are supplied with the Toccata. The basic Toccata control tools include a mixing desk front end that allows you to set the relative volumes of the inputs and output, the sampling rate, and the sample bandwidth (8 or 16-bit). From here you can also select A-Law or  $\mu$ -Law compression, which allows for near 16-bit sound quality using roughly the same amount of disk space as an 8-bit sample. For example 8-bit bandwidth has a noise ratio of 48dB, 16-bit has a noise ratio of 96dB, while A-Law or  $\mu$ -Law can achieve a 70dB noise ratio. This optional compression is handled on the fly in real time during recording and playback.

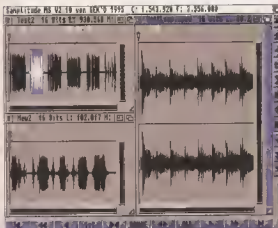
Simple recording and replaying tools are also included which can also be remotely controlled via Araxx. Finally there are some bits and pieces for anyone who wants to develop their own software to control the card.

Samplitude is the main editing software. This allows sampling direct to disk and comes with a good selection of basic editing functions, but is light on effects processing tools. Fortunately both Samplitude and the Toccata Tools can be used to control the board simultaneously. For example you can monitor incoming signal prior to sampling from within Samplitude, drag the so-called window and adjust the input gain levels from the Toccata Tools panel, with the results taking immediate action. There's also a playlist section which can be used to string together a sequence of samples.

MacroSystem are currently working on new software that will feature simultaneous recording and playback through the card, along with 'multiplexing' routines that allow for a number of channels to be output at the same time.

## Sound quality

On the surface it would seem that the sound quality should be equal to a well recorded CD and that is generally the case. If you're used to wrestling with the



A Samplitude MS 2.1 comes bundled with Toccata offering hard disk recording and sequencing facilities, along with a good selection of basic sample editing functions and support for plenty of sample formats.

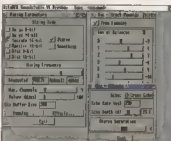


noise and distortion inherent in 8-bit samples, moving up to 16 bits is a real pleasure. For example, 16 bits give ample bandwidth for you to use subtle effects such as reverb without introducing a load of 'stepping' noise, as the steps are much finer. For the same reason, you can sample a long 808 bass drum filter out any top end noise, and you'll be left with a very clean pure bass sound. Try that with an 8-bit sample and you'll be stuck with a phasing high frequency content on the decay tail.

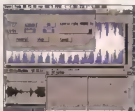
## Good potential

Frequency response seems to be up to scratch, although in our tests the bottom end of some samples lacked a little definition in places when compared back-to-back with the source CD sound. There is a slight click every time the Toccata begins to play a sample and another straight afterwards. This isn't too intrusive if you are mixing it with Amiga audio and would not matter too much if you were using the card to spool one continuous long sample in an audio-visual context. This does not happen for each sample when using SoundStudio's mixing mode, as the Toccata is only 'opened' at the start of the song and 'closed' at the end. See the Third Party Support panel for more details on this. Overall the sound quality is excellent.

One of the reasons Toccata has not been widely used as a musical tool in the past is that it can only replay sounds at one of 14 preset sample rates ranging from 5513Hz to 44100Hz (CD rate) and 48000Hz. Therefore there are not enough steps in



▲ 48KHz 16-bit output and stereo panning for each track is possible with Toccata and the new OctaMED SoundStudio.



▲ Sampling offers a step in sampling format, recording to either RAM or a hard drive.

between to be able to replay a tuned instrument sample as a melody, although the new SoundStudio works around this. However, with sample rates that include 32000Hz (the same as the Akai S01 entry level MIDI sampler), 44100 (the rate used for mastering CDs) and 48000 (another popular rate) it has many potential uses for digital mastering and editing samples from external sources. This could be very handy considering the editing software on many hard ware samplers is very basic.

## Conclusion

Toccata is more versatile than it first seems. If you're on the look out for a 16-bit sampler you've probably already got a good idea of what you want it to do, whether it's hard disk audio mastering, real-time music applications, audio for video and

## Third party support

Although Toccata was designed mainly for multimedia users rather than musicians, it is now well supported by OctaMED SoundStudio. One of the new features of SoundStudio is its ability to retarget its tracks of samples to alternative output devices. Instead of driving the Paula chip directly, it can now process all of the sample data as the module plays, mix the combined result into a stereo signal and push it out through the Toccata's 48kHz 16-bit output.

Up to 32 tracks of samples can be played at once and each track can be panned to its own independent stereo position. Realtime Echo effects are also available. The resulting sound quality on an Amiga equipped with a 50MHz 68030 processor sounds very slightly grainy compared to a high quality standard four channel Amiga module. The quality you get will depend on the speed of your Amiga and the amount of available RAM.

SoundStudio also allows you to play a single channel of stereo or mono 16 bit Toccata samples in standard four-channel mode. The Toccata output is much cleaner in this mode. However, in this mode the replay pitches of the Toccata samples are limited to those listed in the specifications box elsewhere on these pages. In effect this means that in this mode you cannot play melodies with Toccata instrument samples, as there is not enough flexibility in the replay rates.

Back on the multimedia side, there's support from MediaPoint, Scala and Hero and Pipes. The ARexx ports of the Toccata software also means that you can use it with programs that don't have built-in Toccata features.

multimedia or editing samples for use with external MIDI gear. It's capable of handling all of those jobs competently some better than others. It's already proven itself as a worthy companion to VLE Motion but its increasing support from third party software developers has opened up its potential market to thousands of Amiga musicians (there's even a Toccata driver available for DelTracker). While technically it doesn't compare very favourably to the current PC sound card market (dominated by multibit boards with onboard effects and more), in which light may look a little overpriced with just a single stereo output channel, it's in a very different marketplace so direct price to power comparisons aren't really relevant.

This won't solve all your audio problems overnight but it's quite a capable system for a number of specific audio applications, including digital audio mastering for example. For digital video work it's by far the best value audio solution, and the excellent support from OctaMED SoundStudio also makes it a tempting proposition for musicians. With more powerful software on the way from MacroSystem, the future looks very bright. ■

Tony Horgen



▲ Toccata modules with a minimal selection of leads in allow connect to your sound source and amplifier or mixer.

## Technical specifications

Inputs:	2 stereo line, 1 stereo microphone
Outputs:	2 stereo
Modus:	8 bit, 16 bit, 4-level, software (all same in stereo)
Input Impedance (line):	10k
Input Impedance (mic):	5k
Output Impedance:	470
Input Amplification (line):	10-33
Input amplification (mic):	10-300 mV
Max output amplitude:	2.2V
Dynamic range:	100dB approximately
Frequency response:	10Hz-20kHz (full level, +1/-0.5dB)
Sample frequencies:	5513, 8016, 8000, 9600, 11025, 12000, 13000, 22050, 27429, 32000, 32078, 37000, 44100, 48000 Hz

## TOCCATA

### System requirements

Amiga with Zero slots, 652 or above, 1MB Chip RAM, 2MB local RAM, hard drive.

### Range of options

- 4800: 48KHz, 16-bit, stereo, good value.
- 12000: 12KHz, 16-bit, stereo, good value.
- 11025: 11KHz, 16-bit, stereo, good value.
- 13000: 13KHz, 16-bit, stereo, good value.
- 22050: 22KHz, 16-bit, stereo, good value.
- 27429: 27KHz, 16-bit, stereo, good value.
- 32000: 32KHz, 16-bit, stereo, good value.
- 32078: 32KHz, 16-bit, stereo, good value.
- 37000: 37KHz, 16-bit, stereo, good value.
- 44100: 44KHz, 16-bit, stereo, good value.
- 48000: 48KHz, 16-bit, stereo, good value.

### Overall

Competent in a variety of audio applications

82%



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# SX32

If you've bought a CD32 but feel limited. Why not turn it into an A1200? The SX32 provides the solution ...

■ Price: £199/£299 ■ Developer: DCE Computers ■ Supplier: Visage © D115 964 2828

**W**hen the CD32 was launched it was intended to be a true blue, straight down the line, no fluff games console. It was 32-bit, had a CD-ROM drive and was allegedly the future of gaming. But it was something else too. Underneath that dark grey exterior, that toilet seat lid, behind the facade of Joystick one and Joystick two ports lay the guts of a standard, 2Mb AGA Amiga 1200.

On the back of the CD32 there is a little screw-on door. Go on, take a look. This door opens to reveal a large empty space with a 72 pin connector built in. In the old days of exuberant optimism this port was most famous for allowing the Commodore FMV card to be attached, with all the *Star Trek: Terminator* and *Jurassic Park* CD film hilarity this entailed. Unfortunately the big C didn't get very far with the FMV card before going bust: it barely got past prototype stage. Some say this was a good thing. Phil Collins was about to release a 'Best Of' album on Video CD around the time they went belly up. What was that about clouds and silver linings?

## SX1 shortfalls

However, it had one other expansion: Paravision's SX1. This was a large metal box similar in colour to the CD32, with a socket which could be attached to its 72 pin connector and it was designed to fit flush with the back of the console forming a sort of L shape. It was a God-send for those who needed a computer as well as a console, especially those who like their games to look better than average - it had an RGB port. It also had serial and parallel ports, a floppy disk drive port, facility for a standard PC keyboard and space for an internal IDE hard drive. However, the SX1 must have been designed with the CD lid closed all the time, because whenever you perform the simple task of flipping the CD lid open it jogs the SX1 slightly which could cause problems, such as instant crashes. The other disadvantage is that

it plugs onto the side of the CD32, making for a rather awkward sprawling desktop setup.

## SX32 solutions

The SX32 is designed by rival Garmen company CDE to overcome these problems and it does so in the most logical way: using all that empty space I talked about inside the CD32. It attaches to the same port but the circuit board is housed inside the CD32 instead of the SX1's external metal casing. Like the SX1 there is also provision for a hard drive to be fitted and this is inside too.

All that sticks out of the back of your CD32 is a 1 centimetre protrusion painted in the usual brand of attractive Commodore

Grey. This houses the five sockets that connect the SX32 to the outside world. These are:

Serial, Parallel, Disk Drive, RGB end, unusually, VGA. Unlike the SX1 the

serial port is standard Amiga 25-pin as opposed to the PC 9-pin standard.

The inclusion of a VGA output is useful for direct connection to a VGA monitor but the outputs are not buffered which means that it's not really practical to use the RGB and VGA outputs simultaneously. Technically, if you wanted to, you could view what's on your CD32 using the composite output too and the RF.

It's also worth noting that you will need a PC monitor capable of handling the Amiga's horizontal and vertical scan rates if you intend to use the VGA output, which, in the case of the AGA CD32 is 15-30 KHz and 48-73Hz respectively. This means that many PC VGA monitors will not work and you should be aware of this if you own one and think that the SX32 would slot in nicely in front of it.

## Starting up

Installing the SX32 is a tad more complicated than the SX1, mainly because you have to unscrew and open up the CD32. This voids the warranty but



4. The SX32 makes very little cosmetic difference to your CD32, but such an add-on module has some changes internally. A disk drive is pretty essential. The Amiga 1200 did model used when you buy the CD32's colour text, as is the AGA keyboard and mouse. Visage will supply a keyboard and disk drive (not this one), as part of an expanded package.



you'll be lucky if you've still got one at this stage, so this is not much of a problem. Technically speaking if you were only installing the board without a hard drive, you could just jam it in, but this is no way to treat £200 worth of kit. With the cover off the CD32 it's simply and easily slots into the 72-pin connector and the circuit board sits on top of the metal shielding covering the CD32's circuitry. Rubber feet are at both ends of the board to allow it to rest securely on the case. You can then replace the top of the console and hey-presto, everything's back to normal.

One of the other top class reasons for having an SX32, apart from the keyboard, mouse and Workbench, it gives you access to is that it enables you to insert RAM and a hard drive. 4-8Mb of 72-pin Simm inside it will not only help you down the path of productivity but it will speed your games up in a way you never imagined—even standard CD32 games. It really helps games like Alien Breed 3D, which are almost too sluggish for words on the standard CD32.

## Accelerator?

One of the biggest improvements the SX32 could have had over the SX1 was provision for an accelerator. You can add up to 16Mb of RAM but there's no substitute for an upgraded processor as well. This is where an SX32 equipped CD32 really falls short of its A1200 cousin. You're limited to the standard 14MHz 68020 and there's no way out. Even taking size limitations into account a motherboard upgrade to the 28MHz 020 currently used in 1220

accelerators would have been welcome. But sadly none of this has happened.

## Getting connected

I tested the SX32 with all manner of software, both from CD, disk and Hard Disk. And it worked perfectly with everything. Unlike an A1200 with a CD-ROM drive you really do have the best of both worlds here: all CD32 and Amiga CD-ROM titles will work, without exception. And like an A1200 you can connect a printer, run business software, use a modem and surf the net; the choice is yours. But the inevitable trade off is that some applications do require acceleration to run at an acceptable speed and there is only so much speed that extra fast RAM will give you.

Also, you must remember that it's not just an SX32 you need, you'll also have to invest in a keyboard, a mouse, an external disk drive and Workbench software. If you already have an Amiga of some sort you'll have the mouse and Workbench and maybe an external drive but the keyboard isn't as straightforward as it was in the SX1. With that unit you could use an old standard PC AT keyboard. These cost £15-£25 now and I've picked one up before for a few secondhand (with a PC believe it or not!) The



▲ See how neatly the SX32 fits inside the CD32's case. Even has a lead drive and DMF RAM, which really does make a difference to the modified CD32's overall speed. Provides for an accelerator and PCMCIA would have been real icing on the cake.

SX32 has no separate keyboard input so you have to use the PS2 style port on the CD32 itself (beside the jockey ports). PC PS2 keyboards will plug in fine but won't work, so the only option is to purchase a rare and very expensive replacement A4000 model Bummer!

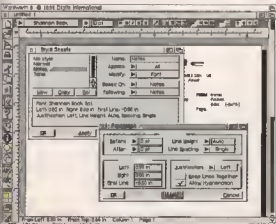
Lucky Visage intend supplying the SX32 with both an external drive and a compatible keyboard, but not Workbench, which is proving difficult to source. You can still run autobooting disks and many CDs boot into Workbench and you can continue to use this. But there is no substitute for the real thing and sooner or later you'll need part of the Workbench system that's not on whatever you're booting off. The keyboard and external drive bump the price up to £299, so hunt around for an old A4000 keyboard first if you're serious.

So is it better than the SX1 then? Well it depends on your priorities. Scanning the ads (and I can only find one for the SX1 in last month's mag!) I make it slightly cheaper than this unit at the moment. It costs £8 less than Visage are quoting for the SX32 and although a decent disk drive will set you back the best part of £50 for either peripheral, using the AT port you will save more than a couple of quid on a cheap PC keyboard. On the other hand you might want something that actually fits snugly inside your CD32, rather than a cumbersome external box, and one which has a standard Amiga serial port as opposed to a PC one. You might also want a real

Amiga keyboard with the proper keymaps and names, not some cheap, confusing alternative (an AT jacked Amiga keyboard will almost be as expensive as an A4000's). The difference in price is, in the final analysis, only one of around £20-£30. Both SX1 and SX32 are up to the task of turning a toy into a valuable computer tool, the SX32 just does it in a neater way. **Alan Dykes**



▲ Alien Breed 3D in just one of the CD32 games which benefit from the speed boost of fast RAM.



▲ A word processor and a printer will make you realise that you need your console, but turned out a real winner. The case size and screen applications of disk in CD will set the pace in program your own games.

## SX32

**CD32 system requirements:** 68020 chip with CD32 Keyboard, external disk drive and mouse are necessary. Accepts up to 16Mb RAM or 72 pin single or double sided SIMMS and a Hard drive.

Works to set up and then is easy to use as an AT286 with the CD-ROM drive.

Visage intend to supply the SX32 with an external drive and a compatible keyboard, but not Workbench, which is proving difficult to source.

On the other hand you might want something that actually fits snugly inside your CD32, rather than a cumbersome external box, and one which has a standard Amiga serial port as opposed to a PC one.

**OVERALL:** With acceleration this would eclipse the standard A1200.

**86%**



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# OctaMED SoundStudio

**A new generation of trackers is about to arrive, bringing Amiga audio bang up to date, starting with SoundStudio.**

**S**oundStudio 1.0 is set to be the first release of a next generation of OctaMED sequencers. Although it may look just the same at a glance, the menus have some powerful new features. How do you fancy 64 tracks of samples, each with its own stereo pan position, with optional delay and echo effects? That'll do nicely thanks.

## Retargetable audio bonus

The key to SoundStudio's stunning new features is its own kind of 'retargetable audio'. In the same way that retargetable graphics systems allow you to direct graphic output to any one of a number of display boards, SoundStudio supports six different audio output options. Normal four-channel trackers traditionally take advantage of the Amiga's built-in sample replay functions, using the Paula chip directly to replay samples from

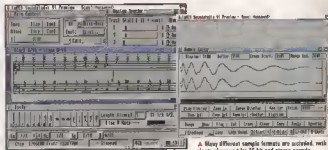
chip RAM. While this is very efficient in terms of speed, barely taxing the CPU, it does have limitations such as allowing no more than four samples to be played at once, with two samples sent to the left channel and the other two to the right.

SoundStudio gets around these limitations by inserting a new signal processing stage before the sound is output. In effect, the

sample data is read from anywhere in memory, including Fast RAM and then it's processed according to the user's settings, during which the samples are mixed, given a stereo pan position, echoes are added if required and then the final stereo signal is output to the chosen destination. The destination can be the Amiga's standard audio output (both 8-bit and 14-bit output is supported), a Toccata 16-bit output, a 16-bit Maestros output, or even sent straight to a hard drive as a continuous stereo 8 or 16-bit sample.

## No limits

The advantages of handling the sample manipulation with software routines are manifold. For example, the Amiga cannot play samples in reverse as standard. This is no longer a limitation. Passing samples through effects routines is



**A** The notation editor makes a return in a new improved form after its absence from the last two major OctaMED releases.

**A** Many different sample formats are accepted, with plenty of support for 15-bit and stereo sounds.

now possible, and although at the moment this is limited to delays and echoes, in future this may be expanded to include phase and chorus effects. We may even see synthesiser options such as resonant filtering (as already featured in Musicline Editor).

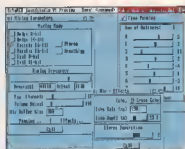
Output quality will depend on the speed of your Amiga. Faster processors can mix the tracks at a higher rate, thus introducing more of the original sample information and introducing less noise. The system comes into its own on a fast Amiga (50MHz/330 or better) with a 16-bit output device, such as a Toccata card. A stock AT200 will struggle to achieve good reproduction of the higher frequencies which start to sound stretchy as if low sample rates are being used. Good news: the notation editor is back! It vanished when OctaMED

when OctaMED morphed from its custom GUI of version 4 to the windows and menus of version 5. A notation display isn't very well suited to a tracker editor (much of the tracker information is impossible to display using traditional stave notation) but some still find it reassuring to be able to view their melodies in this way. It also gives you the chance to output your modules as hard copy via a printer.

## So good, so far

We had hoped to bring you a full review in this issue but it's still in development, so we'll have to wait a little longer for a full analysis. It's looking good so far and if author Teijo Kinnunen can pull it off, it could be the best reason yet to keep your Amiga at the heart of your sequencing set-up for years to come. ■

**Tony Horgan**



**A** These are the most impressive new controls - SoundStudio's unique retargetable audio features that break away from previous limitations.

## It's on the CD, it is

The CD edition of this month's CU Amiga Magazine includes a non-save demo of OctaMED.

SoundStudio. You can run it straight from the CD (you'll find it in the Sound drawer). A generous selection of multi-channel Screamtracker (SSM) modules have also been included, which can be loaded into SoundStudio. This is an early preview version, so everything won't be fully working at this stage. Have fun!













# Limelight Tyro

■ Price: £65.80 ■ Developer: Future Software Systems ■ Supplier: Future Software Systems ☎ 01628 24318

**A** s established software packages get increasingly powerful, complex and more expensive, the market for a low-end introductory alternative starts to open up. While Limelight Tyro doesn't aim to compete with the likes of Scale, MediaPoint or VideoStage Pro, it does have a few tricks of its own to help win the approval of the less ambitious videographer.

Like most video titlers, Limelight Tyro uses a two-tier screen layout, one for the screen you are putting together and another laid over the bottom which houses the control panel. This allows you to have an interlaced display screen with a more comfortable non-interlaced control panel both visible at the same time.

There are three modes in which the program can be used, from novice to advanced. In novice mode, the menus only reveal a few of the total available selections, with more on offer in intermediate mode and the whole lot available in advanced mode. It's a kind of "blinking" system that is supposed to lead you gently into the program without confusing you with a mess of options from the start. You might expect this sort of approach with some kids' educational software, but I'm not sure of its worth in a 'grown up' product such as this.

There is also no direct way of jumping from one menu to any other. With around a dozen menus in Tyro this often means that you have to move through

**A new entry level video titler which claims to offer some powerful features but can it deliver the goods?**

several menus to get to where you want.

## Features

Limelight Tyro is a fairly basic video titler. The first step is to enter some text. This can be done via the keyboard or by using the mouse to click on a graphical representation of the keyboard that appears on the control panel. Although this seems pointless, it may be useful in very unusual such as when the program is running on a CD32 system with no keyboard, or if your keyboard was faulty. There is also a disconcerting time lag between you typing the text and the letters appearing on the screen. They do appear instantly in the text box on the control panel but on the main screen, it takes a little longer to draw the characters giving the impression that you've misspelled your words.

Style changes can be made to the text once it's on the screen. The usual selections of colour, bold, underline, italic, spacing and kinning are available, with a 3D drop shadow option and a further shadow which uses a dithered pattern to produce a semi-transparent shadow that is effective even when using a genlock. Bitmapmed and Compugraphic fonts can both be used at any selected size.

Colour IFF backdrops can be loaded into your pages. Tyro automatically alters the screen mode to match the imported image. You're free to use overscan modes on any Amiga and AGA modes are also supported.

## Transitions

When it comes to transitions, Tyro provides line and screen effects. While there is a good selection of wipes and fly-ons to choose from, there is nothing outstanding and there are occasional glitches with the more processor-intensive



▲ Even if you would prefer to enter text by using the mouse rather than typing it in on the keyboard I'm not sure. You can cycle through various keyboards for lower case letters and symbols.

ones. I couldn't achieve the videographer's favourite vertical scroll without each page stopping for a split-second although the horizontal crawl works well.

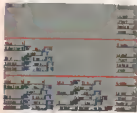
If you are using a genlock to transfer your titles to video then there is one special feature. Connect an RGB monitor to your genlock and you can set in motion Tyro's On-line and Off-line feature. While in Off-line mode your video passes straight through the genlock without any graphics showing. This allows you to construct and preview your graphics on the RGB monitor without fear of them being recorded. When you are ready to introduce your titles into the video, just switch to On-line. And all this happens without the need for additional hardware or switching on your genlock. This feature would especially appeal to a studio using a live video feed with the need to create titles on the fly, but this isn't really the beginner's territory that Tyro is aimed at.

If you have a low end machine with no hard drive you will have missed out on last month's VideoStage Pro cover disk, in which case Limelight Tyro should fit the bill, but don't expect it to add too much pizzazz to your productions. ■

**Norman Harris**

## LIMELIGHT TYRO

2500	<b>SYSTEM requirements</b>
1000	Any Amiga with Hardware 2.08 or better 2MB RAM. Workbench with AGA Chip Set and 400K RAM recommended.
1600	For the quickest or prepared to get up with 1 more practical manual page.
1200	Adapted to the three video half but not supported to add much to it.
8500	Workbench and the use of the screen layout editor.
42000	<b>OVERALL</b>
10000	Adequate entry level titling program.
20000	<b>70</b>



▲ Two types of screen changes depending on the level you desire to use Tyro. From the top we have: Header, Screen and Footer.



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# Hi-Q PowerStation

■ Price: £299.95 ■ Developer: HiQ Ltd ■ Supplier: HiQ Ltd ☎ 01525 211327 <http://www.hiq.co.uk>

**Anyone wishing to expand their A600 or A1200 to have CD-ROM and SCSI capability should take a look at this effective device.**

**T**wo problems face the A600/A1200 owner wanting to expand their machine: one concerns where to store the drives and the other concentrates on how much electrical power you'll need. These worries mainly effect external devices such as CD-ROMs and other SCSI devices. Hi-Q have partially come to the rescue with their PowerStation, which although a simple device, can be highly useful for those intending to connect some real hardware to their A600/A1200.

## Squirrel driven

The PowerStation consists of a rather nice PC tower case, a SCSI extension cable and an internal SCSI ribbon which terminates in a connector for the extension cable. The theory is that

you use Hi-Soft's Squirrel PCMCIA SCSI interface fitted to your A1200 (or A600 for that matter) and attach the extension cable to the Squirrel's SCSI connector. Most SCSI devices can be fitted into the tower case, attached to the internal ribbon and driven by the Squirrel.

The PowerStation has a healthy 200W power supply in the case. This not only runs any SCSI peripherals connected, it has an Amiga cable too, so there's no need to buy a Goliath to power your accelerator and internal HD. Hi-Q want part of the stock power supply (AKA The Brick) back in exchange though, since Amiga Power leads are in short supply. You simply snip the connector end of the lead and send it to them. The transformer itself can then be used as door stop, a task it's more suited to than attempting to power an expanded Amiga. Your monitor can also

be plugged into the pass-through power socket on the rear of the tower so that with a simple push of the button, Amiga drives and monitor are all powered on or off. Darned handy.

## Audio freaks

The most common configuration available from Hi-Q is the Tower, as reviewed here, fitted with a Sony 2.4 speed (breaking the tradition of drives being even multiples of single speed units). This mechanism features in a pack from Hi-Soft reviewed previously. It's proved to have excellent access time and a healthy rate of transfer as well as a facility to be able to send audio data down the SCSI bus. Audio freaks will love this feature as the highest possible quality samples can be obtained with no extra hardware. A very respectable and cost-effective mechanism to have built in. Hi-Q does well with this Sony mechanism. Also included with the CD-ROM are two sets of RCA/Phono jacks which allow the CD audio to be mixed into your Amiga audio through the loop.

Annoyingly, the tower has a panel which covers the drive bays. This would have to be left open to get regular access to the CD drive. If not concerned with appearance the user might prefer to remove it all together.

The tower, unfortunately, is a little too deep for my liking. It will use quite a lot of desk space but being equipped with 2 full 5.25" drive bays and two centred 3.5" drive bays, it does at least have the requisite storage. The innards of the tower generally have everything that's required. A healthy length of internal SCSI cable with 5 x 50 way SCSI connectors fitted will be more than enough for any drives internally. The connector at the rear of the tower also has a pass-through connector so that external devices could still be looped through such as

the Zip drive which is still not available in an internal form.

## It all depends

Whether the PowerStation is a worthy purchase depends on how many SCSI devices you want to connect. If all you want is a beefier power supply and a CD-ROM with SCSI capability then a Goliath and Hi-Soft CD bundle is £235, which is more than £50 cheaper than the PowerStation. However, if you wanted to add a SCSI hard drive, it would be difficult and messy to do without the tower. You'd need an external box and power supply, which would probably cost about the same as the PowerStation but wouldn't have as many future expansion options. In this case I'd recommend the PowerStation.

The PowerStation is an effective highly expandable system that's well constructed if a bit large. Although Amiga owners just wanting one or two SCSI devices in the foreseeable future might be better served by an external box, the PowerStation is a good option for anyone needing to add several internal SCSI devices. Such a set-up with a SCSI HD, CD-ROM, internal ZIP (when available) and perhaps coupled with the forthcoming Hi-Soft Surf Squirrel (extra SCSI speed and high speed serial) would be an admirable Amiga system indeed. Recommended. ■

Mat Bettinson

## Hi-Q PowerStation

**SYSTEM REQUIREMENTS:**  
A200 or A600 only

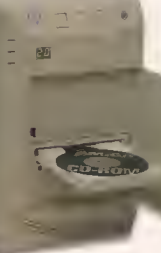
**A600** Just plug in the extension cable, turn on the internal HD in a tower case.

**A1200** Place which needs to pass up a lot of disk space through.

Half of the cost is made up from the CD-ROM mechanism.

**Overall Recommended**  
A worthy expansion solution

**84**



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# CD-ROM

We've gone CD-ROM crazy this month. There's a special bumper edition of choice shiny discs for you to look at.

## Round Up



### F1 Licenceware Volume 1

Licenceware software is really cheap commercial mail order software. The 'ware' part of the name comes from the idea that it's like pre-registered shareware. The range of software covers games, education and utilities, along with a few music-related disks. The games are generally sub-standard AMOS creations but there are a few highlights, such as *Relics of Daldoneye* and *Giddy*. The utilities section is made up of disk magazine creators, a video title, a game map editor, a database, a picture converter and



presented with a non-DOS disk containing software that may have no quit option can be infuriating. This is an exceptional case and much of the software can be run straight from the CD, but system-friendliness seems not to have been a high

priority in most cases. Finally there's the miscellaneous drawer which is filled with disk magazines and quiz programs.

While there are some goodies on the CD, much of the software will not satisfy the demands of 'power' users. The need to unpack to floppies on many occasions and then be

Available from: **F1 Licenceware**, 31 Wellington Road, Exeter, Devon EX2 9DU. Tel: 01392 493 580. Price: £29.99 plus 50p P+P.

**60** %

### Danny Amor's Online Library Vol 1

If you haven't already checked out the World Wide Web pages on this month's cover CD, do so immediately! Right, now you've done that, you'll be familiar with the idea of using a web browser to view documents on a local drive. It works well and it's a lot cheaper than doing it over a phone line!

Danny Amor's Online Library is using the same system to present his 200 plus books on this CD. The selection takes in a range of public domain publications, including of course *The Bible*, along with lots of reference material from various sources, such as the CIA, which



supplies encyclopedic information on every country in the world with population figures, financial status and all that kind

of stuff. There's also some classic fiction from Charles Dickens, Robert Louis Stevenson, Tolstoy, Mark Twain, Jules Verne, HG Wells and Antonella D'Addio. Some of the volumes are text only but there's also quite a bit of illustration to keep your mince pies stimulated (bit of cockney thrown in for the Londoners, I like it - Ed).

There's not enough room on the CD for it to be anything like

a fully featured library but there is a wide enough variety of topics. It doesn't seem to be aimed at anyone in particular. Maybe a more focused selection would help arm the CD at a particular audience. Even so, it's quite an impressive presentation all the same.

Remember you'll need a web browser in order to use this CD.

Available from: **GTI, Zimmermühlenweg 73, 61440 Oberursel, Germany** (see adverts for UK suppliers). Price: TEA.

**80** %



## Nothing But GIFs

While some graphics collections are filled out with scraps from the bottom of the public domain barrel, Nothing But GIFs offers a wide range of high quality images. As you've already guessed, all the pictures are in 256 GIF format. The sizes vary but most are around 640x512 pixels, which is just right for high resolution interlaced screens. The pictures are separated into three main sections: drawn, digitised and rendered.

The first section is made up of

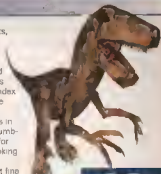


pictures from demos and what look like DPaint doodles. The largest size of the disc is taken up by the digitised pictures, which are split into animals, buildings, glamour, landscape

miscellaneous, people, plants, space and transport sections. Finally there's the rendered area, which holds all of the 3D ray-traced and fractal-generated images.

There's an ArrivaGuide index included on the disc to make viewing as easy as possible. There are also index pictures in each drawer made up of thumbnail versions of the images for quick reference. If you're looking for a good photo library CD, Nothing But GIFs will do just fine.

**Available from: 17 Bit Software, 1st Floor Offices, 2/8 Market Street, West Yorkshire WF1 1DH. Price:**



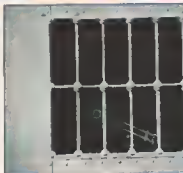
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**89** %

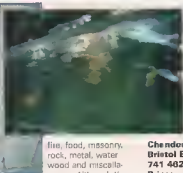
## Texture Portfolio

One of the best features of this CD is the printed index booklet that comes with it: a collection of 24-bit texture and back-drop images, each of which is pictured in the booklet along with its filename. It's high time that CD-ROM producers started producing proper documentation for their discs, as it makes using them so much easier.

The images are duplicated in three formats (JPEG, TARGA and PICT) and most are digitised from



photographs. Each one is segregated into one of the following areas: abstract, animal, clouds,



fire, food, masonry, rock, metal, water and wood and miscellaneous. Although the duplication of the images means that there aren't as many files as there might be on rival CDs

they're all very clean and you won't find any fillers.

Whether you want textures for 3D rendering or backdrops for general graphics and video work, Texture Portfolio has plenty to offer.

**Available from: Ground Zero Software, 4**

**Chandos Road, Redland, Bristol BS6 6PE. Tel: 01179 741 402.**

**Price: £29.99 plus 75p P+R**

**91** %

## Workbench Add-On

The theme here is productivity, or to be more precise, how to increase it. Workbench Add-On covers most of the areas you'll find on the Aminet and Fred Fish CDs (fonts, mods, text, development tools, sound, games, fonts, utilities, disk tools, games etc) but in this case it's mostly ready to run rather than archived. Magic User Interface is included and is required to make full use of the CD.

Sensible emphasis has been placed on registering the shareware software on the disc, to the extent that the accompanying booklet has a number of registration forms complete with



addresses and prices, in both English and German. It's good to see such a responsible attitude, as without shareware registrations, there

would be no shareware to put on the CD in the first place. One of the best aspects of

this CD is the generous amount of sound samples and music modules. The samples can be auditioned straight from the disc but unfortunately many of them replay at the wrong speed. Even so, the overall quality of this CD is exceptionally high and there are quite a few 'original' samples, rather than the same old ones that crop up on most CDs. Well worth a look.

**Available from: GTI, Zimmermühlenweg 73, 61440 Oberursel, Germany. Price: T&A.**

**84** %



## Aminet 10

Click here to inspect, descriptions to read the readme or get help

File	Size	Path	Description
1. Aminet-10.lha	3552	38	Aminet-10.lha: The New Character Pack, 100000, 100000
2. Aminet-10.lha	1782	3	1. Aminet-10.lha: The New Character Pack, 100000, 100000
3. Aminet-10.lha	3000	30	1. Aminet-10.lha: The New Character Pack, 100000, 100000
4. Aminet-10.lha	4272	20	1. Aminet-10.lha: The New Character Pack, 100000, 100000
5. Aminet-10.lha	992	10	1. Aminet-10.lha: The New Character Pack, 100000, 100000
6. Aminet-10.lha	4272	12	1. Aminet-10.lha: The New Character Pack, 100000, 100000
7. Aminet-10.lha	4672	22	1. Aminet-10.lha: The New Character Pack, 100000, 100000
8. Aminet-10.lha	448	20	1. Aminet-10.lha: The New Character Pack, 100000, 100000
9. Aminet-10.lha	1112	70	1. Aminet-10.lha: The New Character Pack, 100000, 100000
10. Aminet-10.lha	778	8	1. Aminet-10.lha: The New Character Pack, 100000, 100000
11. Aminet-10.lha	2808	70	1. Aminet-10.lha: The New Character Pack, 100000, 100000
12. Aminet-10.lha	792	86	1. Aminet-10.lha: The New Character Pack, 100000, 100000
13. Aminet-10.lha	992	70	1. Aminet-10.lha: The New Character Pack, 100000, 100000
14. Aminet-10.lha	1812	48	1. Aminet-10.lha: The New Character Pack, 100000, 100000
15. Aminet-10.lha	1088	22	1. Aminet-10.lha: The New Character Pack, 100000, 100000
16. Aminet-10.lha	1192	70	1. Aminet-10.lha: The New Character Pack, 100000, 100000
17. Aminet-10.lha	1278	6	1. Aminet-10.lha: The New Character Pack, 100000, 100000
18. Aminet-10.lha	2298	6	1. Aminet-10.lha: The New Character Pack, 100000, 100000
19. Aminet-10.lha	1778	18	1. Aminet-10.lha: The New Character Pack, 100000, 100000
20. Aminet-10.lha	3642	40	1. Aminet-10.lha: The New Character Pack, 100000, 100000
21. Aminet-10.lha	1492	284	1. Aminet-10.lha: The New Character Pack, 100000, 100000
22. Aminet-10.lha	918	2	1. Aminet-10.lha: The New Character Pack, 100000, 100000
23. Aminet-10.lha	1448	2	1. Aminet-10.lha: The New Character Pack, 100000, 100000
24. Aminet-10.lha	2228	26	1. Aminet-10.lha: The New Character Pack, 100000, 100000
25. Aminet-10.lha	992	23	1. Aminet-10.lha: The New Character Pack, 100000, 100000
26. Aminet-10.lha	1372	14	1. Aminet-10.lha: The New Character Pack, 100000, 100000
27. Aminet-10.lha	394	2	1. Aminet-10.lha: The New Character Pack, 100000, 100000
28. Aminet-10.lha	3008	6	1. Aminet-10.lha: The New Character Pack, 100000, 100000

Here it is, the latest grab bag from the Amiga's definitive on-line shareware archive. It's all here: demos, utilities, software pictures and a special focus on music modules. The format is just as before, with most of the files stored as LHA archives. Fortunately these can all be accessed from an intelligent AmigaGuide document, which automatically plays modules, displays pictures and unpacks archives as necessary. Not everything works straight from the guide, but it's a good system in general. Highly recommended as always.

**Available from: Exclusive**



**PD, First Floor Office,  
Coltsfoot Drive,  
Waterlooville, Hants PO7  
8DJ.**

**Price:  
£12.99  
plus  
75p P+R**

**90**

## The Epic Collection

Epic have their own unique approach to PD and shareware, often compiling their own themed packs of disks to complement the rest of their library. The Epic Collection is their PD library compressed into DMS files and put onto a CD ROM.

The DMS files must be unpacked onto floppies before use. This is the only way to archive some demos, but it's a pain to have to go via floppies if all you want is to access some files or utilities. As there are very

alternative disk structures, it's shame you don't get the chance to unarchive to a specified drive.

However, the software included on the disc is varied, fun and



often quite useful. The front end is attractive but uses a system of dual selection windows, mak-

ing it easy to accidentally decompress the wrong disk. The lack of quit and screen cycle

gadgets is also irritating but if you're not used to using Workbench this may not be so much of a problem. All in all, a bit of a mixed bag but there are plenty of gems to be found, wherever your interests may be.

**Available from: Epic  
Marketing, Victoria Centre,  
138-139 Victoria Road,  
Swindon, Wiltshire**

**SW15 2JL, Wiltshire**

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**78**

## Phase 2



The Phase series of clip art and font CDs has proven itself to be the most reliable source of graphics for video. DTP and general



graphics work. Phase 2 uses the same format as the others, dividing its clip art into mono IFF, colour IFF and EPS, while its

image bank has duplicates of all files rendered in 18 colours, 256 colours and HAM-8 mode. There are also Type 1, CG and ProDraw fonts. Subjects covered in the mono clip art are animals, fantasy, music, people and religion. The colour IFF clips include birds, cars, cats, dinosaurs, dogs, fish, horses, The Lion King, music, planes and reptiles. Then there's the EPS section with animals, buildings, computers, food, logos, office, people, transport, USA and the world. As for the images, we get animals, balloons, Blake's 7, cars, Conan, Dragon Lance fantasy,

horses, natural, planes, racing, renders, reptiles, snow scenes, space, Star Trek, trains and backdrops for video work. Added to that you also get some bonus bits, including all the PageStream 3 updates, the Opalvision 2.3b update and utilities, Timesmith 2.5a update and more.

**Available from: EMC  
Computergraphic, 5 Edith  
Road, Clifton on Sea, Essex  
CO15 1JU. Tel: 01255 431  
399.**

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# PD Scene



A plathora of divina cheapness, in quality form, awaits you. Dava Cassidy takas a look at the holy world of new Public Domain software.



## On the CD

Check out the CD edition of this month's issue of CU Amiga Magazine for the best of this month's Public Domain, including the amazing Dataworld.

## Dataworld AGA demo

A storming 80Mbs of animation makes up this rather tasty demo. It was an entry in The Party 95 demo competition held in Denmark at the end of last year, where it won second prize in the Wild Demo section.

It's a series of expanded 3D animations with a techno soundtrack. Featuring abstract morphs, stomach-churning camera rolls and loads of lens flare it's quite a treat. As it's so big you won't find it listed in PD library catalogues and you're unlikely to want to spend all day downloading it from the net or a BBS. Here's the good news: it's on this month's cover CD! If you have the CD edition of this magazine you'll find it ready-to-run in the public domain section.

Once you've watched it through a few times you can try using the esim player (YP) from the shell to play the anime. Read the documents on the CD for details.

**Available from:** Our cover CD. Not available on floppy disk.



90 %

**Demo  
of the  
Month**

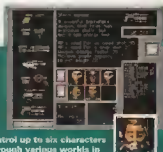
## Hilt 2 game

Strategy games are rarely my favourites, but Hilt 2 really enveloped me. It's

simple enough to get to grips with, you control up to six characters who must venture through various worlds in order to destroy the enemy. To do this you must solve puzzles and cunningly use your forces to outwit your computer opponent. Each move consists of any combination of possible actions, such as walking, using computers, firing weapons and so on.

The range of possibilities within the game seems to be endless, and there's plenty of depth, especially with the prospect of extra mission disks becoming available. This is an extremely well executed game – as the polished graphics and sound testify – and fully deserves your attention.

**Available from:** 5th Dimension Licensseware, 1 Lower Mill Close, Goldthorpe, Rotherham, South Yorkshire S63 9BY. Tel/Fax: 01709 88812 7. Price: £3.95 including P+P.



91 %

## Blobble game

Simple gameplay is the key here. All you have to do is guide a spherical chap around tiled areas, collecting tokens, points and letter bonuses. Tiles with cracks in them make life complicated, as do tiles which allow movement in only one direction. The graphics and sound are of a fair standard and the controls are sensitive enough to keep you busy.

**Available from:** Fraastyle PD, 190 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NN. Tel: 01922 710955. Price: £1 plus 50p P+P.



84 %



## Contentious game

This is one of those split screen two-player games where you have to find and kill the other player. The playing areas are fairly large, but because the maze is so big, finding your opponent becomes as much a game of luck as tactics. You need some breadcrumbs to lead so you can leave a trail. Failing that it's pure luck.

Contentious is two player only, which limits its appeal, but with a cool theme tune (that for the life of me I can't name) and a built-in level construction kit, there's loads of longevity for those with fellow death-wishers they'd care to share the fun with.

Available from: 6th Dimension Licences, 1 Lower Mill Close, Goldthorpe, Rotherham, South Yorkshire S63 9BY.

Tel/Fax: 01709

88812 7.

Price: £2.98

including P+R.



75%

## Voyage In A Storm AGA demo

With four disks you'd expect something fairly brilliant and that's just about what you get in this production from Impulse. It kicks off with a zooming, rotating texture-mapped polygon which is smooth even on a fairly basic 930 system. The music grabs your attention and syncs in perfectly with a superbly smooth run down an alleyway with curved walls - not so easy to achieve. Complex realtime Gouraud effects follow, with some simply gorgeous still graphics and another amazing module featuring a melodic vocal track. A landscape flyover finishes the whole deal, so you can sit back and watch the usual scroller, catch your breath.

The Party 1995, held at Christmas, seems to have produced a fair selection of demos, and this is certainly one of the better ones. If you've got the hardware, check it out.

Available from: Freestyle PD, 108 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NH. Tel: 01922 710985.

Price: £4 plus 50p P+R. Requires hard drive and 2Mb Fast RAM.



93%

## Bomb Mania game

This is an interesting twist on Dyseblastor, in which you have to kill all the nestles on the level and collect the goodies by laying bombs over the playing area whilst avoiding blowing yourself up! Gee or two players can participate in the various worlds, with custom worlds also premised shortly.

Bomb Mania is well worth a look if you're into simple concept games that offer innovative twists on tried and tested concepts.

Available from: Freestyle PD, 108 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NH. Tel: 01922 710985. Price: £1 plus 50p P+R.



85%

## Galerie AGA demo

The atmospheric music contributes a lot to Stellar's entry to The Party '95, with light-sourced terrain spires, including light flares taking the first hours. Concentric rings spin in multiple planes and these we're taken into warping tunnels and spinning vectors. It's fairly short, but well constructed overall, although very noticeable glitches can be seen occasionally.

Available from: Freestyle PD, 108 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NH. Tel: 01922 710985. Price: £1 plus 50p P+R. Requires hard drive and 2Mb Fast RAM.



80%

## Crazy Sexy Cool AGA demo

Einstein's tongue kicks off this Essence production and the superb quality of the graphics shown here is maintained throughout. A laid back acid jazz/trip hop concoction keeps the action shuffling along at a steady pace, so effects such as texture-mapped polygons, Gouraud-shaded torts with phony twists and light-sourced animated polygons sweep across the scene. It doesn't smack you between the eyes but takes you on a relaxing journey through some of the better code currently doing the rounds.

Available from: Freestyle PD, 108 Woodside Way, Short Heath, Willenhall, West Midlands WV12 5NH. Tel: 01922 710985. Price: £1 plus

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CD-ROM containing over 1,300 of 3D-FX images, including, 3D objects, 3D music, 3D documents, 3D movies.

Subjects & 3D-FX images included are: Bicycles, Starlines (The original 3D), Deep Space 9 and Thunderbolt, Thunderbolt, Space Quest 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 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# PD Utilities

public  
domain

Tony Horgen rummages through his Public Domain mail bag and pulls out a selection of weird and wonderful utilities for you to teke your pick from. Foody, cookery, music, it's all here.

Utility  
of the  
Month

## DMC

### disk mag creator

Nothing to do with the Disco Mailing Club, this DMC stands for Disk Magazine Creator and is designed to help you build your own floppy publications. I was expecting DMC to consist of a main editor/construction program from which you would collate and combine the various pages but it's not really that kind of a system. All of your pages must be written in a text editor and coded by hand to indicate font colours and so. Similarly, the article files for the index pages must be coded from within your text editor with directions to further text and IFF graphics files. For example, the colour palette is defined by a list of six three figure hex values that must be entered into one of the configuration text files, eg. \$A2, 0FB, 19E, CCA, 915, 234. Simple ah? Yeah, right!

You can also use your own graphics for the control panel. When you've arranged all of your files on the disk and named them correctly, DMC will load them automatically when it is launched. Files compressed with CrunchMania are automatically decompressed.

There's an place for confusing formatting codes to be authoring pages. They are fine as an optional extra but this should be handled by an editor program with a graphical front end, complete with buttons and menus for defining fonts, text styles and so on. Across between Scals and a DTP package is what's required. However, DMC will find its takers, and some will no doubt put it to use and produce fully-fledged publications, but don't expect too

much.  
Available from:  
F1 Licensware,  
31 Wellington  
Road, Epsom,  
Devon EX2 9DU.  
Tel: 01292 493  
880. Price: £6.99  
plus 50p P+P

55%

## World of Football Icons

### AGA icon pack

Football crazy, football mad? If so, you'll probably jump at the chance to plaster your Workbench with this set of footy-themed icons.

Every team from the English League is included, from the Third Division up to the Premiership. There are pictures of the teams' shirts, complete with the sponsorship logos. You also get foreign club teams and the world's national teams. There's an extra section called Football by Another

Name, which has similar icons for rugby and American football teams. The series includes icons based on Star Trek, sci-fi, sports, glamour and other subjects.

Available from: TMC,  
22 Worreder  
Crecent, Dunbar, East  
Lothian  
EH42 1LU.  
Price: £1  
including  
P+P

81%

## Steve Headroom talking head

Here's a strange one. Steve Headroom isn't really a utility but it's quite interesting all the same. Steve is a character who bears a strong resemblance to Max Headroom, right down to the weird scrawling backdrops. He's been programmed with a vocabulary of digitised words, from which he constructs random sentences that still niche some kind of sense.

What's the point? There isn't one, apart from to keep you entertained at times of boredom, or perhaps to comfort lonely Amiga users. I like it anyway, even if the deadpan intonation of the voice starts to grate after the first 30 seconds.

Available from: 17 UK Software, 1st  
Floor Offices, 2/5 Market Street,  
Walsfield, West Yorkshire WF1 1DR.  
Tel: 01824 260822. Requires 2Mb Chip  
RAM. Price: £2.00 plus 50p P+P

80%

## DMC GOLD RELEASE INTRODUCTION

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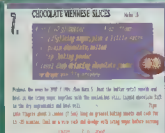
## Granny's Cookbook 1

If you happen to have your Amiga set up in the kitchen, a recipe book might come in handy, you never know.

Granny's Cookbook Volume 1 has suggestions for ten varieties of home-made biscuits, presented as a slideshow of IFF screens. Highlights include chocolate chip cookies, Dutch kisses and coconut cookies. Give it a shot if you're bored of those old-fashioned paper cookbooks.

**Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M26 9YJ. Tel: 0161 723 1638.

Price: £2.00  
including P+P



78 %

## The Hit Kit 2 sound tools

Maybe this should be named The Hit and Miss Kit (boom boom!), it's a collection of sound utilities, as follows. PlayMod is a ProTracker module player that's useful due to its low memory overheads. Interplay 4 is a CD player with a few handy buttons and functions. VSound is a crude oscilloscope that can run in a Workbench window or on its own screen. PWSInfo is a system information diagnostic tool.

JustPlay is another small module player. SNED allows you to edit the instrument settings of a module. MIDIPlay refused to work from the disk, but I presume it plays MIDI files when it works. MusicDots is a little AMOS program which creates 'music' (random ping sounds) as little dots bounce around the screen. Multisample is a handy if limited sample conversion tool. Mod2Smp converts modules to samples (ie theory, but it didn't work with any I tried, not helped by the lack of docs). APercKey is a potentially useful sample triggering device that desperately needs a graphic interface (at the moment it requires the user to enter a long-winded config file in order to get any sound at all).

So there you have it. If anything tickles your fancy you now know where to get it.

**Available from:** Roberts Smith DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE. Tel: 0191 459 1626. Price: 90p plus 50p P+P



78 %

## Sauce and Code 3 AMOS tutorials



Presented in the format of a disk magazine, Sauce and Code is a collection of AMOS programming tutorials and examples. All of the examples are geared towards writing demos and games, many of which come with source code to be loaded into AMOS, text explanations and a few cases, executable files that can be run straight from the front end. The subjects covered in this issue include text scrolling, text effects, screen zooms and warps, and a sprinkling of other assorted visual tricks.

If you're into AMOS and have aspirations that exceed the limits of the manual, Sauce and Code is well worth a look.

**Available from:** Roberts Smith DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE. Tel: 0191 459 1626. Price: 90p plus 50p P+P



80 %

## Revision Master education

Unless you're some kind of speedy swot, when it comes to



revising for exams, you need all the help you can get. Revision Master is a question and answer quiz designed to probe your memory and test your knowledge of a specialised subject. Rather than attempt to cover everything from political history to home economics with a massive database of questions, it suggests that you (or a friend) build up your own bank of questions to suit your subject. I would imagine preparing the questions yourself would have limited value but if you could find someone to do it for you it could be quite useful.

As a bizarre form of bonus disk filler you also get a small animation of a galloping horse, seemed from photos taken by Edward Muybridge during the 19th century (try using it as a setim brush).

**Available from:** Roberts Smith DTP, 190 Falloden Way, Hampstead Garden Suburb, London NW11 6JE. Tel: 0191 459 1626. Price: 90p plus 50p P+P



76 %



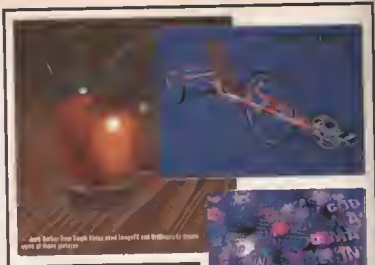
**Only £11.95**

**The AMOS AGA EXTENSION - AMOSZINE 9** Loads of graphics, sound files, herbs & tips, tutorials, and lots of source code. Also includes our own AMOS Q & A. Only £11.95.



# THE ART GALLERY

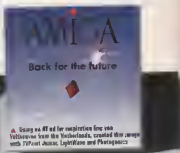
**Wanted: art gallery  
entries. Please send to  
usual address.**



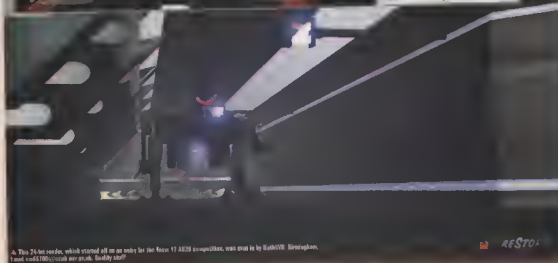
▲ Art Barker from South Africa used Image4 and Photoshop to create  
some of these pictures



▲ The Image 3000 and 3 combination of  
Power and Image4 led the stick for Tony Shorro, Texas, USA



▲ Using an A4 ad for computer line via  
Vellumline from the Netherlands, created this image  
with TDPaint, Jigsaw, LightWave and Photoshop



▲ This 24-bit render, which started off as an entry for the first 17 A&C3D competition, was made by MarkOVN, Birmingham.  
I must admit I'm a bit of a fan. Really stuff!



# AMIGA

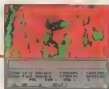
## workshop

### IMAGINE 3.0 92 ●

How do you add intricate detail in one easy step, in Imagine? With a brush map of course. It's easy when you know how

### VIDEOSTAGE PRO 96 ●

We kick off our March cover disk 128 a tutorial with a look at what this excellent video tiling package can do.



Imagine 3.0 92

### GRAPHICS MASTERCLASS 98 ●

Michelle Pfeiffer and Jeff Goldblum get it together in this month's graphics masterclass to produce some interesting results.

### COMMS 100 ●

It's all about Mime this month. No, it's got nothing to do with wearing stinky tops and black leggings, it's how you can add stuff such as animations to your Email

### NET GOD 102 ●

CU Amiga Magazine's undercover internet spy is on the case finding out what is happening out there in the wired world



Net God 102

### SOUND LAB 103 ●

It's a sound lab with a difference this month. Tony Morgan has decided to do a one-off frequently asked questions on Amiga sound. So it's an ASFAQ

### SUBSCRIPTIONS 106 ●

There are pounds to be saved worldwide now, we've introduced special offers across the board. And there's six month subscription offers as well!

### POINTS OF VIEW 120 ●

The CU Amiga Magazine team mount their collective soapbox. Four opinions for the price of one, not bad eh?



Points of View 120

Last month's four-man points of view generated a lot of interest so, this issue, by popular demand, it's three men and one woman's point view. There's also the usual helping of superb tutorials including Imagine and last month's VideoStage Pro cover disk. And check out our superb new worldwide cut price subscription offers and the all new six month option. Unbeatable value for all!

## Regulars

### FAQ 113

Man cannot survive alone but computers can. However, it can be fun if you link two or more Amigas together. Your common queries answered.

### Q&A MASTERCLASS 114

Arex is still here. Following on from last month's look at its internet workings, this month John Kennedy explores exactly what it does.

### Q+A 116

Just to prove Q&A is a two way street we've got some reader solutions to other readers' problems.

### BACKCHAT 118

Happy people, sad people, angry people: it takes all sorts to make up a universe and it looks like they've all written into our letters page.



# Imagine 3.0

## PART 2

**Brush maps are a quick and very easy way of including intricate detail in an object. Learn how to incorporate them into yours.**

**B**rush maps are the secret to creating realistic-looking objects. With brush maps you can swiftly add tiny details without causing a huge delay to your rendering times. For example, imagine the time it would take to create the objects necessary to model a computer board full of connecting circuit lines. However with one brush map you can create the entire object in moments.

Brush maps can be used to apply wallpaper to a room or chunky stone tiles to a swimming pool floor. Once you start creating brush maps you'll be addicted as they allow so much detail to be created in such little time.

Creating the right brush map takes a lot of time, but the end effects will be worth it. With lots of experimentation you will soon build up

your own library of special maps for every occasion. Let's begin.

### Here's how

Using a paint program (here, Personal Paint) draw a simple pattern. Then cut it out as a brush and save it. Think of this image as a sheet of wrapping paper we are now going to create an object and wrap it up.

Thankfully Imagine can wrap objects a lot better than I can wrap presents. See figure 1.

Open a new project and go to the Detail Editor. Create a Primitive Sphere. Select the Sphere (click in the centre or press F1) and increase the scale. Whilst it is still selected, pick ATTRIBUTES from the pull-down menu. Click on ADD BRUSH. See figure 2.

Load in the brush that you created with the paint program. Copy the settings (apart from the name) and in particular check that the Wrap X and Wrap Z boxes are marked. See figure 3.

Perform a Quickrender of the object. Notice how the pattern is wrapped tightly around the sphere, not quite like wrapping paper (which would be bunched up at the top and bottom) but spaced out properly. This is what the Wrap X and Wrap Z options achieved. See figure 4.

It is essential to appreciate the three main ways of mapping a brushmap onto a shape:



▲ Figure 4. perform a quick-render to wrap the pattern around the sphere.

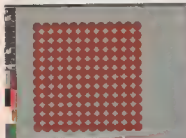
Imagine will normally do most of the work in wrapping but you need to give it a hint about the general shape of the object. You can of course ignore these settings for special effects but stick with them for the moment.

The three main shapes are a Cuboid, a Cylinder and a Sphere. You can see from the diagram which mappings need to be altered depending on the shape.

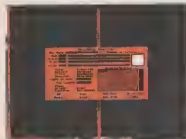
For example, if you wanted to create a planet you would draw the surface (or scan it in from a book) and wrap it around a sphere with Wrap X and Wrap Z switched on. See figure 5.

### A bit tricky

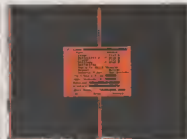
Let's move on to something slightly trickier. Let's say, for example, you wish to place a mapping onto an object in a particular place not entirely covering it. A good example would be placing an insignia on an aircraft



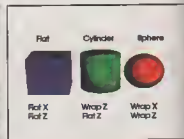
▲ Figure 1. cut out a simple object as a brush.



▲ Figure 2. in the detail editor click on 'Add brush'.



▲ Figure 3. loading in the brush that we created in our paint program.



▲ Figure 5. there are three main shapes - cuboid, cylinder and sphere.





▲ Figure 6: here's our 'friendly' decal.



▲ Figure 7: in 'Edit Axis' the top right square is the map image



▲ Figure 8: you can also rotate brush maps if you want.

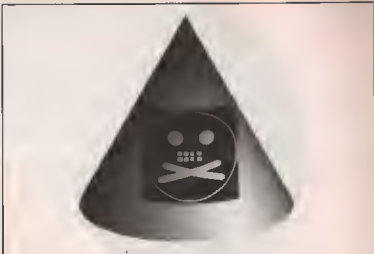
wing. This time the Wrepping format isn't quite as important as the position and shape of the image.

Creating this effect is possible because Imagine treats the brushmaps in much the same way as objects: you can move, stretch and manipulate the map in many ways.

Point a small image and imagine this to be the 'decal' which we will place on our model. Make it small but detailed so you can tell which way it should be. See figure 9.

Now return to Imagine's Detail editor and create a cone or any other primitive shape. This is our model to which will apply the decal. Get a saucer of warm water ready to make the decal slide off the paper backdrop and try not to cover the fuselage with polystyrene cement as this makes it go all cloudy (oops... only joking, remember those days all you air fix fanatics out there?). Open the attributes requester and add a Brush as before.

This time we'll be keeping it flat, so don't touch the Wrep buttons. Instead click on the 'Edit Axis' button. You'll see the window disappear and instead there will be a grid overlaid on the cone. See figure 7.



▲ Figure 9: our decal and object combined to make an unusual sight.

The top right quarter of the grid represents the map image. Use Scale and Move to alter the size and shape until it looks something like the image shown here. You can always click cancel if you get lost, and then start again. Alternatively you can click on the 'Transform Axis' button and enter the new size and position by hand. Don't forget that you can rotate brush maps too if you wish. See figure 8.

When you render it, you'll see that the decal has been changed to cover only a small part of the object. See figure 9.

## Mapping techniques

So far the maps we have been dealing with have concentrated on controlling an object's colour. However, as you will have seen from the brush map attribute menu there are several other ways in which maps can be applied.

### 1. Colour Map

As we have seen, the colour map simply paints the object with the colour in the map. In this case, I have created a very fetching repeating square motif using different shades of gray (and some graduated tones too). OK, it's dull but you will see what a difference it makes when we apply the other mapping techniques. See figure 10.



▲ Figure 10: here's the colour map in fetching shades of gray

### 2. Reflectivity Map

The colours in the brush cause the object to selectively reflect its surroundings. In order to see anything happen you will need to include a Global Reflection Image - do this from the Global settings in the Action editor. The white parts of the map cause the reflection to be strongest, the black parts don't reflect anything at all. See figure 11.

### 3. Filter Map

The colours in the brush make the object transparent. This can be applied to make



▲ Figure 11: the white parts of the reflectivity map are strongest.



▲ Figure 12: the filter map is ideal for a misted glass window effect.





▲ Figure 13a: you put your left bump in, right bump out .... The altitude map is where you can add texture, such as bumps, to an object.



▲ Figure 13b: to create bumps that bump in use the Inverse Video.

stained-glass windows for example or to control complicated graded transparency effects. Black areas in the image are opaque, whilst white areas are transparent. Notice how you can see the other side of the object – you are looking right through it in places. See figure 12.

#### 4. (Altitude) Bump Map

The colour of the brush is used to alter the height of the object. This is an excellent way

to add texture to an object, although it takes experimentation to get it right – particularly in setting the height on the bumps (use Transform to set the Y value to about nine to start with). In this case the square pattern and some dots have been used. Placing the light source in the right place makes a big difference, as the bumps will show up with shading. Use the Inverse Video to provide bumps with bump in and bumps which bump out. See figures 13a and 13b.

## Brush Map Hints

■ Spend a great deal of time working on the brush maps as they will make all the difference to the final model.

■ Use 24-bit images as brush maps if you can, as they will give best results.

■ Use the smallest images you can to each brush map needs to be held in memory. If your finished render is 320 by 256 pixels, it makes no sense to create a 1024 by 1024 24 bit brush map. You'll run out of RAM!

■ Remember that Imagine3 allows you to apply many maps to the same object. This means you can apply a texture, some decals and a bump map all to the same object.

■ If you can't draw, remember that you can always scan or digitise brush maps instead. You can also buy disks full of suitable textures in TIFF or JPEG format. (JPEGs will need to be converted to TIFFs before use.)

■ When applying bump maps, try using the blur feature in many image processing packages to smear the details out. This can give better results.

■ Imagine 3 can deal with multiple brushmaps. For each frame in an animation you can map a different image onto an object. If you can digitise some frames from video this is a great way to create a rendering television set.



▲ Figure 14: the reflectivity map adds varying reflection to an object.

#### 5. Reflection

This is very similar to a Reflectivity Map, except the brush is treated as though it were in the space surrounding the object, where it will be reflected in it if the object is itself reflective. Go on, try it for yourself but remember to change the attributes of the object so that it is reflective or you won't see anything! This technique is potentially useful if you need to add different reflections to different objects in a scene – for example if you are making a very flash company logo effect. See figure 14. John Kennedy





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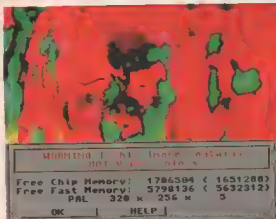
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# VideoStage Pro

PART  
1

Continuing on from last month's feature we take a further look at what you can do with our cover disk 128 VideoStage Pro. Making your own video presentations has never been so easy.



▲ 'Hot' colours that would overload a composite video signal are automatically detected by VideoStage Pro.

Last month we covered the excellent visual presentation system for video work, VideoStage Pro. We also covered most of its main attributes in our walk through guide to creating presentations with it. This tutorial will look at some of other features that we haven't yet covered with this great program.

## On-line help

On-line help is available at any time while using VideoStage Pro – press the Help key to call it up. The relevant page of the help document will be displayed, depending on which part of the program you are using at the time. To view the entire help document, click on the Help button at the top end then navigate your way around it using the AmigaGuide controls.

## Hot colours

Some colours when displayed on video produce a blurred look that will detract from the appearance of your work. These are bright, rich colours such as pure red. They're called 'hot' colours because they seem to burn into the video screen and leave a brief after image. Technically they are colours which would require illegal voltage levels in order to be represented in NTSC or composite PAL video.

VideoStage Pro checks for occurrences of hot colours. For example, when you load in a picture file, after you click on the Add Text/Objects button, you will be in the Text Entry panel. If there are hot colours in the image the Hot Colour indicator in the Text Entry panel should display Red, indicating the presence of hot colours.

To see which colours are hot, click on the Backdrop button or press F8. Now click on the Palette button (near the right edge of the panel). You'll now be presented

with the Colour Adjustment window, from which you can highlight the hot colours by clicking on the Flash button. You can change any of the hot colours using the RGB sliders to reduce their intensity. Click on an area of the picture to select the required colour to be altered or select it from the palette.

## ARexx scripts

If you find that VideoStage doesn't do everything you'd like it to, you can use ARexx scripts to remotely control other programs or video devices from within VideoStage.

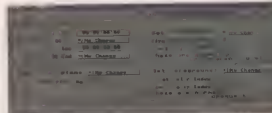
To call an ARexx script all you need to do is drag the ARexx Event icon onto the relevant part of the storyboard and then select the ARexx script that you want to execute. This means that you could, for example, replay OctaMED MIDI sequences by using an ARexx script to tell the OctaMED Player to start playing the current song. In this case you would of course need to have both ARexx (Roxas Meet) and the OctaMED Player running as well as VideoStage Pro. Check the documentation on your ARexx compatible software for specific details on how to control them using ARexx scripts.

## Using genlocks

You can use any Amiga genlock with VideoStage Pro, but there's also specific built-in support for the GVP G-Lock and the SuperGen from Digital Creations. The program is normally set up for use with a generic (normal) genlock. This can be changed to either of the aforementioned genlocks from the Settings control panel.

To use the special genlock features, drag a Genlock Event icon onto the storyboard and click on it to bring up its options. The first option window will appear.

There are two times associated with a given genlock event, the start and end time. The end time is the start time plus a duration. This is due to the fact that some settings can be altered over a time interval, giving a sort of transition between the computer graphics and the live video coming into the genlock. The start end duration can be entered in this window and/or altered on the timeline. Biplane keying (making certain areas transparent) is carried out at the start time only. You can also specify single colours or ranges of colours to be made transparent and/or opaque to the genlock. When more than one colour is involved, the range will be made transparent and/or opaque over



▲ If you have a genlock you can make use of the advanced palette control options for maximum control.



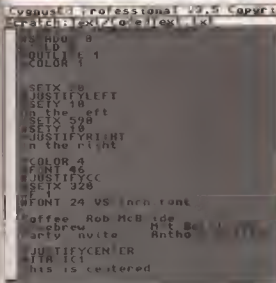
On the left

On the right

Coffee  
Homebrew  
Party invites

This is centered

A font can be imported with ready-made formatting codes which serve you wrapping things from VideoStage.



This is the original text that was imported into VideoStage Pro 2.0 generate the screen it's the top of the page. The first starting with a 'd' sign are the formatting codes. See the panel for more details on the codes.

the time range. This allows you to have a picture gradually changing from opaque to transparent, or vice versa.

If you're using a G-Lock or SuperGen, you'll also see a second window, which will be different depending on which gnlock you have selected.

The G-Lock window allows you to specify the video and audio source at both the start and end time. Remember that your G-Lock software must also be running for this to work.

For SuperGen users, the

second window gives options for specifying the cross fade options of the gnlock. This is done by entering the transparency of the computer graphics as a percentage, both at the start and end time, with 0% indicating all computer graphics, 100% indicating all video, and 50% an equal mix of the two. Enter a value of -1 for no change. Remember that you can change which part of the Amiga graphics acts as the background colour from the previous window. ■

Tony Horgan



There are specific options for both the G-Lock and SuperGen protocols.

## Coding text files

You'll probably remember from last month that you can import text files straight into VideoStage pages. What's more, you can even include all of the text formatting information within the text file, so as soon as it's imported it arranges itself neatly on the screen.

Adding the formatting codes from within the your text editor can be a lot quicker when you're working with large lists of credits.

The codes you enter in the text document relate to all the text on the lines below. For example, if you wanted to change the text to Italian, you would enter "#ITALIC 1" on the line above the part you want to italicise. In this case the '#' sign indicates that a code will follow, 'ITALIC' is the code, and '1' means 'on' ('0' would mean 'off'). Not all codes need to be followed by a number.

Then use the nullabin codes for justification (note the American spelling: centrl).

```
#JUSTIFYLEFT
#JUSTIFYRIGHT
#JUSTIFYCENTER
#JUSTIFYCC
```

The following codes set the X and/or Y location of the text. Note that the Y value is for the top of the text, not the bottom nor the baseline. Replace 'value' with the position given in pixels:

```
#SETX value
#SETY value
```

Before you make changes to the fonts, you can select which of the two fonts you are addressing using the following code, where a value of 0 (zero) refers to the left font and 1 refers to the right font.

```
#F value
```

Now you can define the style of the font. All of the following use a value of 0 to represent off, and 1 to represent on.

```
#ITALIC value
#BOLD value
#UNDERLINE value
#OUTLINE value
```

The shadow option can have one of three values: 0 (off); 1 (cast shadow); 2 (drop shadow).

```
#SHADOW value
```

Font size and name can be set with the following code. Size should be specified in 'point' units while the name should correspond to the font name in the fonts drawer (eg. #FONT 8 Topaz.font).

```
#FONT size name
```

The three colours of the text can also be specified. The values correspond to the colour of the palette, so if the third colour in the palette was red, a value of 3 would lead to red text.

The following codes relate to the main colour, outline colour and shadow colour respectively (remember to use the American spelling: color).

```
#COLOR value
#OCOLOR value
#SCOLOR value
```

These codes can be used in any order and embedded throughout the text, so multiple font changes are possible.

## That's all folks!

That concludes our look at VideoStage Pro. If you still need more information, remember that the on-line help is available at all times. Next month we continue our focus on desktop video with a look at Scale, the top presentation package currently bundled with all new Amigas.



# Graphics Masterclass

**What do you get when you cross Michelle Pfeiffer's eyes with Jeff Goldblum's face? Find out in this month's bit of graphical wizardry.**

**T**his month's graphics masterclass moves off in a new direction, on a mission to turn your Amiga into a state of the art graphics workstation. With a combination of hot software like Photogenics and Image FX linked to the Amiga's AGA chipset or even a 24-bit graphics board, you can do just about anything and that's just what we aim to prove



## UFO sightings

Fact or fantasy? In this case it's fantasy. Whether you believe in the possibility or not there's plenty of mileage to be had when it comes to mocking up pictures of UFOs and other phenomena.

I'm not suggesting that you use your Amiga to make up some pictures and sell them to a popular publication for pots of cash, but:

The pictures we have here may not be the most convincing flying saucer shot you've ever seen but then again most of them are usually blurred and distorted more than this. Even so, if you were to take it seriously and spend some time

on it, I'm sure you could come up with a photo realistic Image using the same techniques.

There are two main components in the image: the spaceship and the background picture. The spaceship was rendered with Imagine, using an object that comes with a little spot-light already attached. You'll find this in the Imagine drawer. If you have the CD-ROM edition of this magazine, this was rendered with no fancy textures, but you could add something like the DeathStar texture for a neat panelled metal

surface. In order to make the saucer blend into the background as naturally as possible, the light source was carefully aligned to match the lighting of the background picture. It was then rendered in 24-bit colour on a

large screen and saved out to disk.

Next it was loaded into Image FX to be added to the Stonehenge backdrop. Using the automatic background detection mode, it was cut out, scaled and pasted down onto the backdrop. If you prefer to use Photogenics, the Compose function does the job just as well.

Finally it was touched up from within Photogenics with some motion blur, blending and a few dots were added for the lights. All that remains is to send it off to *Gullible Alien Theories Monthly* along with a story about how you were abducted just after you took this photo's pagan summer solstice ritual!

**A. Here's our Stonehenge UFO getting ready to make its debut. It's all symmetry man.**



## Sexy eyes

Who do you think this is? The eyes are those of Michelle Pfeiffer and rest is the face of Jeff Goldblum. This is a simple example of a subtle rub through effect. It was created with Photogenics, although the same result could be achieved with Image FX. The two source images are from the Nothing But GIFs CD-ROM and were chosen because both faces fitted the frame of the picture in a similar way.

However, a rub through alone still highlighted the different positions of the features (the eyes appearing above the others). To correct this, one of the pictures was cropped and scaled to match the other. This is simple to do with Photogenics, as you can see both pictures at once, each in its own window. Image FX compares you to switch buffers to compare them (use the J key to speed things up).

All that remains now is to select a subtle brush type, such as the default Airbrush from Photogenics, draw over the features and marvel as the second face appears like a spooky ghost!



## Spiritual harmony

There's no reason to become locked into the habit of producing rectangles 640 x 512 pixel pictures, just because that's the shape of your monitor. This picture, for example, could be reproduced as a poster or wall

hanging, or even used as a scrolling backdrop in an Amiga demo or video presentation.

Photogenics was the tool used to create it. The first Buddha image came from the Nothing But GIFs CD and originally had a blue sky backdrop. This was painted solid 100% blue with a number of Fill processes and then saved out.

Next a blank page was created (solid 100% blue) the same width as the Buddha picture but a lot taller. The Buddha was pasted onto the bottom, and then the entire backdrop was filled using the Gradient Tint option. At this point you may encounter some problems. Filling the majority of a 640 x 1200 pixel 24-bit image requires quite a lot of RAM and even on a 10Mb machine a few tricks had to be employed to get it to work. With undo buffers turned off and other

software closed down, it performed the fill eventually. As you work, memory gets fragmented, so sometimes it's a good idea to save your image, turn the machine off for a few seconds, then power up again.

The finishing touch was the planet in the sky. This was added using the Compose function, with the Brightness Key switched on. A few pixels of the planet image seemed to be corrupt, but a quick smoothing over with the Blur function was enough to sort them out.



## These pictures are on the CD

If you have the CD-ROM edition of this magazine, you'll find all these pictures along with the source images and 'work in progress' snapshots in a drawer called Magazine/ GraphicsMasterclass.





# Wired World

## PART 9

**A picture's worth a thousand words ... so why limit your Email to text? With Mima you can include graphics, sounds - even animations.**



**I**f you been using electronic mail or lurking around in the Usenet newsgroups, you will probably have come across files which have been uuencoded. Uuencoding is a method of converting a standard binary file, for example a program or TIFF image, into a mass of text. The text can then be sent via Email or included in a news posting.

Uuencoding is required because text systems only use 7 bits out of 8 to store the various letters and punctuation symbols. If you sent a program and missed out one bit in eight, whatever arrived at the other end would be totally useless.

Multipurpose Internet Mail Extensions (Mime) is an attempt at making this uuencoding process as simple as possible. It too encodes binary files into text format but this time uses a slightly different standard called Base64. However, the important thing is the way in which the Mime mailing program works.

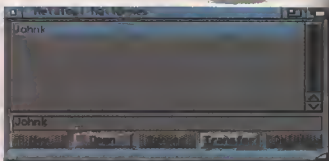
### The ultimate

Unlike the traditional uuencode way, the user does not need to play around with messy CLI only

utilities. Instead, they only need drag a file or two into a special window and it is converted automatically. Each file is converted into a Mime 'part' and included in the mail message. Even more impressive is what happens when the message reaches its destination. If set up properly, an image will automatically be displayed and a MED tune automatically played, making it the ultimate way to exchange data by electronic mail.

### A must have

To use Mime on the Amiga, you'll need a program called MetaTool. MetaTool was written by Ellis Pritchard and is available from the Amnet. I'm assuming that you already have an Email system operating on the Amiga and therefore have experience with either a Mailkick or AmiPOP program for sending and receiving mail. For example, if you are a Demon



▲ MetaTool organises the mail into different mailparts. The name comes from the DEMON environmental variable.

customer you'll be using the SendMail program for handling the mail transfer.

Before you can start using MetaTool, you will need to make sure that you have set up some environmental variables. These sound horrendous but it only means that you need to include the settings for your user name, domain name and host name. The user name will be the name of your internet postbox and this will be the first name you picked when you signed up with your service provider. The domain name is the section you didn't pick yourself after the @ sign in your Email

address and the host name is the part you chose. For example, my Email address is 'johnk@infosys2.thegap.com' and so I set up the variables as in **Figure 1**. If your address was 'bian@toes-track.demon.co.uk' then you would set the variables like **Figure**

**Figure 1**

```
setenv USER Johnk
setenv DOMAINNAME thegap.com
setenv HOST infosys-2
```

**2** You can either type these directly into the Shell every time you re-boot your Amiga, or save yourself a lot of time and include



▲ When you uuencode a file it is converted into text. You can't read it, but you can uudecode it to bring back the original file.



▲ You can send copies of your mail messages to others by including names in other fields. Here I'm letting some people know that I'm having fun.





▲ You can drag-and-drop files or create them from scratch and use a file requester.

#### Figure 2

```
setenv USER brian
setenv DOMAINNAME demon.co.uk
setenv HOST tostrack
```

ready to send a Mime message. Press Right Amiga-N to create a new message. You see the compose window appear and there will already be

to send the message over the Internet.

You can also create parts of the message manually, without dragging and dropping. Click on the NEW button and you can select the type of the object you

want to send. You will then be given a file re-

#### Figure 3

```
text/x-agside; Multiview %s; label="An AmigaGuide file"; edit="emacs %s"
```

them in your a user-startup file. You may find that they have been created for you when you installed AmITCP, you can check by typing setenv by itself and see watch to see if USER, DOMAINNAME and HOST whizz past.

You'll also need to use everyone's favourite Graphical User Interface, Magic User Interface. If you are a heavy Internet user you will probably already have MUI installed to let you run AMosaic or Browsee.

Starting MetaTool should be painless if you remembered the right setenv commands. You'll see your 'mail box' included in the list. Open it up and you are

one element in the list on the left. This is the 'header' and you should select it and press the EDIT button. Now you can enter the Email address of the recipient and any subject the message may have.

### Drag 'n' drop

The easiest way to create a message is to drag and drop icons into the window. Create a text file and save it. Then find the icon and drag it into the window. You can drag and drop IEE images, LHA files or just about anything you can imagine. MetaTool will package them all up and when you click on SEND or DISPATCH it will use the mailer program you have running

quester so you can select the file.

When you receive a Mime message, you can view it in MetaTool simply by clicking on the constant parts in the message list. But how does the Amiga know what to do with each type of file? This is the tricky section but it's the only way to really harness the power of the Mime system.

### MimeTypes

To alter what happens to existing files or to add support for your own specific application programs, you will need to edit the murky

world of the files called 'mailcap' and 'mime.types'. Both are in the MetaTool drawer and you should edit both with a standard text editor. Before you start messing about with them, it might be a good idea to make a copy.

The first file, mime.types, is to help MetaTool work out what sort of file you have just dropped on top of it. By default it will recognise many graphics formats, as well as the Amiga specific AmigaGuide format. Here is how the AmigaGuide format is included:

```
text/x-agside guide GUIDE
```

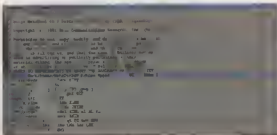
It's nothing too amazing: the file is obviously text based, so the definition begins with 'text'. It's not a standard extension so there is an 'x' added to make this clear. Then we have the possible file extension names in upper and lower case.

The mailcap file tells MetaTool what to do when a Mime file is received. Figure 3 shows how it mentions AmigaGuide files. The matching line in the mailcap file tells MetaTool that when a x-agside file is shown, the Amiga must use Multiview. That's what the section 'Multiview %s' means, as the '%s' will be replaced with the filename.

The last part of the line tells MetaTool what to do when the file is edited. In this case, the emacs program is spawned. You may not have emacs on your Amiga and you may want to edit this line to reflect your own choice, such as CygnusEd or GoldEd.

You can extend this system yourself to better control what application is triggered to take care of an incoming partial and to add support for many other file types. As long as both your system and the system of whoever you are sending the message to have suitable entries in mime.types and mailcap you should be able to send anything by Email. ■

John Kennedy



▲ Mailcap and mime.types are the two magic files for determining what happens when you send and receive files mail.



▲ Create hot boxes - Once you've used to send pictures as easily as text, I don't think I'll be happy for a while when my subject stays eyes on this image of box.





# Surf's up!

Net mod speaks  
AT's Surf Amiga Pack  
is currently only on  
sale in Berlin as a  
marketing exercise  
before it is released to  
the rest of the world.  
Soon to be released to  
the rest of us via the  
normal Amiga distribu-  
tion channels, it's  
caused quite a debate.

The main cause for  
concern is because it  
consists of a stock  
2Mb A1200 bundled  
with software largely  
reliant on MUI. Anti  
MUI types moan  
about the fact that  
MindWalker (formerly  
the Voyager browser),  
AmIRC and AmFTP are  
all reliant on MUI.  
Whilst MUI advocates  
criticise the decision  
to supply a machine  
with only 2Mb specifi-  
cation. Although I can  
see valid points on  
both sides I fell into  
the latter group  
(because IMHO MUI is  
a good thing).

However, getting on  
the Internet on a 2Mb  
machine was going to  
be hard enough but  
with MUI ... Let's just  
say that I'm eagerly  
awaiting the software  
suite so that I can wit-  
ness A5225, MUI and  
Mind Walker actually  
running in 2Mb of  
memory. It seems to  
me that AT can't  
have it both ways.  
They can't argue that  
the Amiga is so  
efficient that it'll  
function with 2Mb of  
RAM whilst simulta-  
neously bundling next  
generation resource  
hungry software. The  
sooner we have a  
4Mb base specifica-  
tion the better.

**Big, big, big news this month: the Amiga Technologies Surf Pack is on sale. In Berlin. Don't worry it'll be with us soon. However, it's already whipping up a storm of controversy on the net ...**

## Amnet goes down

The chief Amnet site at  
Washington University in St. Louis  
USA has crashed spectacularly  
due to a hard drive failure in the  
middle of February, at the time of  
writing of this article. Oddly, it's a  
simple fault that could be repaired  
quickly. It's a different matter when  
you're talking about 64 Gigabytes  
of hard drives going down. The  
system was still down at time of  
going to press. Only when we at  
CU Amiga are without our regular  
Amnet feed do we appreciate  
exactly how wonderful a thing the  
Amiga is. Blank lines are piling up  
on the recent lists and Amiga  
PD/sharers juries the world  
over are wishing Wurchive a  
speedy recovery at the earliest  
opportunity. Wurchive, please  
come back to us!

## New network provider

IMM Studios have announced a  
move into Internet providing. An  
internet 'Cybermall' is to be  
launched soon selling a range of  
Amiga hardware and software  
including the A4000 thereby  
allowing customers to view  
before they buy. After sales tech-  
nical support will also be on  
offer. The Amiga network con-  
sists of many Amigas from the  
A1200 to an A4000/080  
specially used for CD32 Scale  
presentations which are imple-  
mented and then pressed onto  
CDs for interactive touch screen  
lookups. IMM say many more pro-  
jects are due to come on-line in  
the next month. At the moment  
no dial in access is available  
although users are able to hire  
web space for personal design or  
contract IMM to design WWW  
pages for them. You can contact  
them on <http://www.immstudios.com/amion>

## Non MUI WWW wins favour

As the rant on the far left explains MUI has a lot of fans and a lot of  
enemies. The current crop of WWW browsers on the Amiga both  
on general release and in Beta, use MUI to formulate the complex  
GUIs needed for such features as Forms etc. Lately, however, a new  
Dutch browser by the name of AWeb has been in Beta testing. It's  
simple non-MUI interface and its stable nature (unlike much of the  
crash prone competition) has found favour among many users. An  
official AWeb demo can be found on CU Amiga's CD complete with  
documentation in HTML format. There's also quite a bit of other  
WWW pages present so check it out in the Comms drawer if you  
have the CD issue. AWeb's author, Yvon Rozijn, is continuing devel-  
opment on AWeb and hopes to make a general HTML-2 release in  
March (the CD version is limited to local access). For further infor-  
mation contact: <http://huizen.dds.nl/~aweb/>

## Termite TCP at WOA London

Oregon Research, the company  
responsible for the Termite termi-  
nal package, has announced plans  
to show a new TCPAP package at  
the World of Amiga show in  
London on April 13th-14th. Oregon  
say the package was written from  
scratch to provide a TCPAP pack-  
age which requires no knowledge  
of networking or communications  
and features completely automatic  
installation and connection to  
Internet services. The ensemble  
of provided clients and utilities is  
not yet determined  
nor has a retail  
price been set.  
Oregon say they  
originally planned  
to release the

package at WOA but this has  
been delayed due to illness

## Hi-Soft distribute iBrowse

The MUI based WWW Browser  
iBrowse, is probably the most fully  
featured browser currently avail-  
able on the net. The authors have  
always aimed to release it com-  
mercially but only recently have  
announced that Softwood will dis-  
tribute it in the US and Hi-Soft in  
the UK. A demo beta of iBrowse is  
available at <http://www.ompresence.com/ibrowse/>

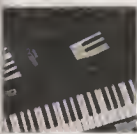


▲ The new Amiga surf pack, the cause of much on-line controversy



# Sound Lab

## FAQ Special



**We get asked all kinds of questions about Amiga sound. Here are some of the most common.**

**■ Q. Why can't I use stereo samples in Amiga trackers like OctaMED and ProTracker?**

**■ A.** A stereo sample is two mono samples and trackers work on the basis of four mono channels. The Amiga has only two stereo channels and you can't play a stereo sound through a mono channel. However, if different samples are played on each side of these two stereo channels, then four different sounds can be produced simultaneously.

**■ Q. My Amiga 1200 uses 32-bit technology, so why can I only play 8-bit samples?**

**■ A.** Most of your Amiga uses 32-bit components, but the Paula chip, which handles the sound among other things, has 8-bit architecture. Unfortunately this was not upgraded when the rest of the Amiga architecture jumped to 32-bits.

**■ Q. Why doesn't my Amiga appear to slow down, even when it's playing a high quality music module?**

**■ A.** The audio hardware gets on with the business of playing samples without having to trouble the CPU while it does so, leaving the CPU free to handle all of its other tasks, hence there's no noticeable slow down.

**■ Q. Some module players claim to play modules in 14-bit resolution. How come?**

**■ A.** The Amiga's sound channels have 8-

bit resolution with an extra four bits per channels for the volume information. These bits are combined resulting in a total of 14-bit output.

**■ Q. Why do none of the Amiga music programs allow you to play samples in reverse?**

**■ A.** They use the Amiga's built-in sample replay functions, which do not include reverse sample replay. However, OctaMED SoundStudio will allow this when it is released.

**■ Q. I want to play very large sound samples straight from my hard drive. Is this possible?**

**■ A.** Yes. Technosound Turbo II Pro will record and replay samples as large as your spare hard drive space. There are also PD tools that do the same thing, such as HD Frequency, OctaMED SoundStudio also promises this.

**■ Q. I want to load modules from demos into my tracker to find out how they were made. Can I do this with single file executable demos or demos that use strange disk format?**

**■ A.** Yes. You need a 'ripper'. There are many rippers available in the public domain. You load the demo, then quit or reset and run the ripper program. This searches the memory for modules and saves them out to disk if it finds any.

**■ Q. When I sample sounds from my hi-fi I**

**always get some interference. Where does this come from and what can I do about it?**

**■ A.** This could be generated by a number of things: your monitor or TV, extra peripherals you may have plugged into your Amiga, or even an internal hard drive. Disconnect everything and try sampling with the absolute minimum set-up, then add more to the system until you find what is making the noise.

**■ Q. What's the best sampler to use?**

**■ A.** Most 8-bit samplers are very similar in design and there's little to choose between them. CU Amiga Megaloud's preference is Megaloud from HiSoft. DSS+ Plus, available from Power Computing, is another good one.

**■ Q. What's the best 16-bit sampler?**

**■ A.** The best value 16-bit sampler is Aurn from HiSoft. Toccata (see review this issue) from MacroSystems is preferred by many and has good support from OctaMED SoundStudio. The Sunrize ADS16 is the best you can buy and is used by many professionals for digital audio-visual work.

**■ Q. Will 16-bit samplers replace my Amiga's four 8-bit channels with four 16-bit channels?**

**■ A.** Aurn adds a stereo 12-bit channel, Toccata adds a stereo 16-bit channel, and Sunrize ADS16 adds two stereo 16-bit channels. This is in addition to

the original Amiga audio channels which remain available exactly as they always were.

**■ Q. What is the difference between a tracker and a sequencer?**

**■ A.** A tracker works primarily with Amiga samples. Notes are entered onto a scrolling numeric display, with optional commands entered to alter the way samples are played. They normally have an integrated sampler and sample editor section. Some, such as OctaMED, can also play and record MIDI instruments. A sequencer is geared towards recording and playing MIDI instruments, normally with limited facilities for replaying Amiga samples. Many 'traditional' musicians find the style of a sequencer much easier to use than a tracker. To generalize, notes are programmed into a tracker, but played into a sequencer.

**■ Q. What is the best tracker available?**

**■ A.** There are two main contenders: ProTracker and OctaMED. There are also many other similar trackers, all of which are PD or shareware, each with its own particular strengths.

**■ Q. What is the best sequencer sound?**

**■ A.** This is another two horse race. In this case the horses are Bars and Pipes Pro and Music X 2.0. Bars and Pipes offers a lot more power and flexibility, thanks to its modular system that allows plug-ins to be written for linking to a variety of hardware and software, such as ADS16, Triple Play Plus (48-way MIDI interface), One Stop Music Shop (Protools synth on a Zorro card), Toccata and more. Music X scores with its relative simplicity, some unique working methods and because it has been around long enough to build up a large following. **■** Tony Horgan.



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ISSUE 4 HAS ARRIVED







# Frequently asked questions

**Everything you ever wanted to know about networking ...**

**■ Q. What's the easiest way to connect two Amigas?**

**■ A.** The simplest way is to use a Null modem cable to link up their serial ports. You can then run a comms program on each Amiga (for example, Term or NComm) and use the X, Y or Z Modem protocol to transmit files.

**■ Q. Is this how networked games work?**

**■ A.** Yes, nearly all networked games on the Amiga work using a Null modem cable connected between the two machines.

**■ Q. Games aside, is there a better way?**

**■ A.** Yes. The serial port isn't amazingly fast. OK, if you connect two Amiga 1200s fitted with HiSoft's new Surf Squamell PCMCIA device, things will be a lot faster but there is still a better way of linking the machines, the parallel ports for example.

**■ Q. What software do I need for linking Amigas with the serial ports?**

**■ A.** You can use ordinary terminal emulation software such as NComm or Linnm on the Amiga, and Terminate on the PC. Then set the baud rates and other settings to be the same and use Zmodem to copy the files across. You could also use the program 'TwinExpress' which is available from the Amnet and PD libraries. It makes sending files a lot simpler by running a custom utility on each machine.

**■ Q. Can I link two Amigas via their Parallel**

**ports and use the comms software as before?**

**■ A.** No, you can't. Parallel ports are not designed with communications in mind and so you will need special software. The best known system is ParNet and the best distribution is called ParBench. Setting up ParNet can be very hard and the ParBench system includes an official Commodore installer system to make it a lot easier. Ask your PD library for ParBench or get it yourself from Amnet.

**■ Q. Apart from speed, why is ParNet better than a serial link?**

**■ A.** ParNet provides true networking features (although not terribly advanced ones). This means when the Amigas are linked there is a new device on each machine called NET; and this is a link into the remote hardware. It means that one Amiga could use the hard drive or CD-ROM drive of a second Amiga.

**■ Q. What sort of cable do I need for this?**

**■ A.** You need a special cable and instructions for constructing it are given in the ParNet archive. You must not connect a standard parallel port to parallel port cable, as this will damage the Amigas. You must make (or buy) a cable designed for use on the Amiga.

**■ Q. Can I network a CD32 in this way?**

**■ A.** Yes, although there are various reasons why this is tricky. It's best to buy a CD-ROM and lead kit already made up,

from a dealer such as Brian Fowler Computers.

**■ Q. Is there another way of linking Amigas via parallel ports?**

**■ A.** Yes, you can use a commercial system called Liane. Liane comes with a special parallel cable but the software support is offered through 'Envoy'. Blittersoft sell Liane in the UK.

**■ Q. I've heard of Envoy, what is it?**

**■ A.** Envoy is the standard Amiga networking package, written by an ex-Commodore employee. It is a commercial product, currently at version 2. It is more advanced than ParNet and offers a lot of features, such as the ability to share printers, full security and inter-network routing. It also is 'hardware independent' in that it doesn't mind which hardware the network uses, as long as there is a suitable driver.

**■ Q. Is Envoy available for other hardware?**

**■ A.** Yes, as long as there is a suitable driver, called a SANAD driver. This is an Amiga standard for networking support. For example, the AmiTnx networking system uses the floppy disk port and it can run Envoy as well. Envoy will also run over Ethernet.

**■ Q. What is Ethernet and what can I use it?**

**■ A.** Ethernet is a fast networking standard used on PCs and other computers. It allows transfer speeds of up to 10Mbit/second over various types of cable. Many machines can be linked together over Ethernet. It is possible to buy Amiga specific network cards for Amigas with Zorro slots.

(Blittersoft sell the Anadne card). It's also possible to buy a GoldenGate 2 card and fit a PC Ethernet card (EyeTech sell the GG2 in various bundles).

**■ Q. Can I use Ethernet on an Amiga without Zorro slots?**

**■ A.** There are no A1200 Ethernet cards currently advertised in the UK, although there are rumours of some available in the US. Sadly, although PCMCIA and Parallel port Ethernet adapters are available for the PC, no one has created a version for the Amiga.

**■ Q. Can I link my Amiga to a PC network?**

**■ A.** If you have an Ethernet card, yes, you can set up both the Amiga and the PC to use the TCP/IP transmission protocol and link the machines in that way. This makes it possible to run Telnet, FTP and even X Windows systems. If you don't have an Ethernet card, there are still ways to link the Amiga at least in theory. One approach would be to use a SLIP or PPP connection into an Amiga running Windows95 or a version of Unix such as Linux.

**■ Q. How advanced is a TCP/IP network?**

**■ A.** In terms of filesystem support, not very. You can copy files using FTP but if you have used this you'll appreciate that it is basic to say the least. One possible solution is to use a Novel style network system, but details of Novel support on the Amiga is sketchy to say the least. More promising is the version of a program called SAMBA which has appeared on Amnet. This aims to mount PC Windows Workgroups on the Amiga and vice versa, which would be a very flexible method of working. **John Kennedy**



# Masterclass AREXX

## PART 2

We've looked at what  
Arexx is all about, now  
we're onto to bigger things  
such as how it works.

**F**or those of you unfortunate enough to have missed last month's issue let me recap.

ARExx is a very useful programming language. What can you do with it? Write programs is the obvious answer, and by golly that's what we'll do. ARExx looks a little like the well-known programming language BASIC, but it is considerably more flexible. Not only does it include many powerful commands, but it can control other programs and be appended to include support for, as an example, standard Windows and Menus.

### What makes her tick?

Last month we saw how to install ARExx and run a single program. Now we'll look at some more programming examples to get an idea as to the way in which ARExx works. First, let's examine the SAY command as it can be slightly trickier than you might expect. The best way to discover its secrets is to enter the following program and execute it. To do this, create a text file which contains the listing, save it and then use 'RX' followed by the filename. Do not simply type this into a Shell, as it won't work (see example 1).

#### Example listing 1

```
/* Say examples */
SAY Hello world
SAY "Hello World"
SAY 'Hello World'
SAY "Hello" "World"
SAY "Hello"|"World"
SAY ~"Hello World"~
```

When you run the program with RX you'll see something like figure 1 (top left).

The first thing to note is that the program, like all ARExx programs, starts with a comment. If you leave the comment out the program



Figure 1: The best way to get to grips with the SAY command is to run the above program with RX.

won't run. Now we come to six different ways of putting text on the screen. The first method uses no form or quotes – only text. You can see that ARExx displays it as upper case.

The subsequent examples use quote marks. You can use either single or double, as long as you are consistent. The first two quoted examples will produce identical results. You can also see that splitting the words into two and adding quotes to each automatically adds a space. If you don't want a space, use the concatenate command (||) which joins the two text strings together without introducing any extra characters. Finally, if you want to include quotation marks, use a different sort – imagine the outmost pair being removed.

With output mastered, we can now learn how to make programs more interactive by getting input from the user. The simplest way

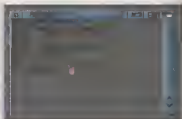


Figure 2: Here we can see that the first pull takes in the name while the second pull takes in the numeric value which in this case is age.

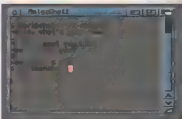


Figure 3: (U – Umlaut, I am not 21 do you know, I'm a sprightly 27 years old and don't you forget it).

to do this is with the PULL command, which waits at the Shell for something to be entered, (see example 2, figure 2 and 3a).

The first PULL takes in a text string and converts it into upper case (we don't ask for this to happen, it just does). The second PULL takes in a numeric value. There is no distinction between the text and number PULLs as far as we are concerned, it's up to ARExx to keep track of which is text and which is a number. The IF-THEN-ELSE statements do a little processing and that is all there is to it.

### Variables

We can't go much further without touching on the concept of variables. Variables are locations in the Amiga's memory which store specific values and are referenced by a special name.

For example, when we asked for your age using PULL, ARExx creat-

#### Example listing 2

```
/* Pull examples */
SAY "Hello, what's your name?"
PULL name
SAY "Nice to meet you" name
SAY "How old are you?"
PULL age
IF age > 28 THEN SAY "Now, that's old..."
ELSE SAY "That's not very old."

EXIT
```



ed a variable and stored a number in it. AREXX deals with variables in a very flexible way when it comes across some text which does not mean anything to it, it assumes it's a variable. If the variable hasn't been used before (that is, it hasn't been initialised) then it has as a value its own name in upper case.

This is why our very first example, SAY Hello world, did what it did. AREXX thought "Hello" and "World" were two variables and so printed them. As the default contents of a variable is its own name in upper case, the program display "HELLO WORLD".

Now here is an example of how you can make variables which store more than one value. Let's say we need to store the names of five different types of fish, for the start of an excellent Fish Database program. We could use five separate variables and get the names like this.

```
.. FULL first-fish
FULL second-fish
FULL third-fish
FULL fourth-fish
FULL five-fish ..
```

and so on. However, this would make the

## Example listing 4

```
/* More Variable examples */
age = "Unknown"
age.john = 28
age.brian = 15
age.mary = 35
age.anna = 34
SAY "Enter a name, please:"
FULL name
IF age.name = "Unknown" THEN SAY "Sorry, I don't know " name
ELSE SAY "That person is" age.name "years old"

EXIT
```

program rather lengthy. It would also be very hard to expand the program at a later date to include more than five fish.

A better way is to use a compound variable – a variable which has a single base name but stores different values depending on the associated name appended with a full-stop. Here, here, look at example 3.

When it is run, you should enter five fishy types. The program automatically creates and assigns variables called "fish 1", "fish 2", "fish 3" and so on because the "i" is actually the loop counter which counts from 1 to 50. Notice the second part of the program goes through the fish names itself, looking for a match. Imagine how hard this would be if there were fifty fish to process... (see figure 3).

Don't think that you have to use numbers to reference the values which a compound variable can store all the time though.

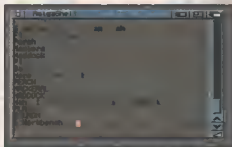


Figure 3 compound variables are handy when it comes to dealing with lots of items which you want to store and maybe add to later.

## Example listing 3

```
/* Variable examples */
SAY "Give fish please"
DO i = 1 TO 5
    FULL fish.i
END
SAY "Here is the list..."
DO i=1 TO 5
    SAY fish.i
IF fish.i = "HADDOCK" THEN SAY "Bak! I
knew you would say Haddock"
END

EXIT
```

Example four is an interesting little listing. It creates a miniature database of ages for four people and then asks you to pick a name (see example 4).

Of particular interest is the fact that when no extra reference is given, there is an automatic default value present (which we call "Unknown") and this can be tested for (see figure 4).

Next month, we'll be concentrating on making use of AREXX with existing programs, creating your own user-defined Macros to do exactly what you want with minimal effort. ■

John Kennedy

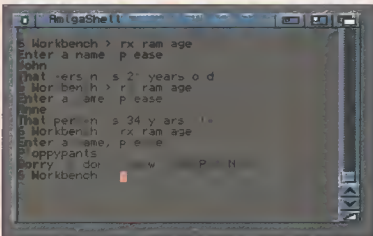


Figure 4 there is our database of four people, there is an automatic default value "unknown" which comes into play when it doesn't recognise a reference.

## It's all there on the CD

If you've got this month's CD-ROM edition you should be delighted with all the top stuff we've managed to cram on there: games, utilities,

pictures, demos and lots more. We've also tried our best to include most items relevant to this month's workshop section.

And the AREXX Masterclass is no exception. You will find these listings included on the CD-ROM on the cover of this month's CD-ROM edition. Go to the drawer called Magazine/AREXX Masterclass and you should find the tutorial stuff there. You will also find some programs from previous AREXX Masterclass features: please read the text file before running them!



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**Lies, tired of cheating Tony around the office for Q&A, let him have it. Poor, poor lad ...**



**On seeing Tony's fate. Met quickly scribbled down the answers before taking the first plane back to Aussie.**

## Good on ya



I have an A600 with a 40Mb hard drive, a Citizen ABC printer and a Power Computing quick speed CD-ROM drive. I've now decided to take the plunge and upgrade to an Amiga Technologies A1200. I am going to buy one from a friend who wants to sell his so he can buy an A4000. What do I need to get to enable my current A600 peripherals to work with the A1200.

**Richard Jones**  
Perth

*Congratulations on deciding to upgrade, you'll have a great time with the A1200. Your hard drive, assuming it's an internal one, will work fine on the A1200 - just follow the fitting instructions in our May '95 issue. Likewise your Citizen printer just needs to be plugged in and you'll be pumping out colour pictures to your heart's content.*

*The CD-ROM drive will also work happily on the A1200 without modification, just slide the Scatter Interface into the PCMCIA slot as you do on the A600 and it'll work fine.*

## Adorage aggravation



Many thanks for your answer to my Adorage SSA demo query, 'Adorage blues' in CU Amiga.

February issue. Unfortunately, I am still unable to use the program and shall therefore put it on ice until you are able to assist me further.

Using Opus5, I set about transferring IconX from my

Workbench C directory to the C directory on my Adorage working disc. I was presented with the error message 'As Error Occurred Copying IconX DOS Error: Disk is full.'

When I checked the available space on the Adorage working disk it was 967b. The IconX file however, says it needs 1452b. My 1200 has 240Mb hard disc and 4Mb expansion board. Please help. What do I do now?

**Roy Firth**  
No address supplied

*My, you are demanding aren't you. Firstly let's clear up a slight misunderstanding you seem to have.*

*The problem you're having is that there isn't enough space on the floppy disk that Adorage is on, the amount of hard drive space or RAM in your computer will have no bearing on this.*

*As to your current problem, trying to fit a 1452b file into a disk that only has 967b left won't work, your only solution will be to delete some of your files off the Adorage disk.*

*To do this use DOpus and try removing the Logo JFF file from the Images drawer. This will however leave you without a foreground file to load into the program when creating animations (unless you already have some others) so it's probably worth copying the file to somewhere on your hard drive first. Again, you can use DOpus to do this.*

## Auntie Agnus



I read with great interest your reply in February issue to a letter from Derek Bailey asking about upgrading an old A2000 from 512k of chip ram to 1Mb of chip ram. You

asked if a reader could help with the various modifications needed to increase the Chip memory for Amiga motherboards. I carried out a similar modification on my B2000 (rev 4.4) last month, here's how I did it.

Having installed the 1Mb agnus you need to alter two jumpers on the motherboard, so open the A2000 and take off the PSA end drive mount once again. You should find two solder pads labelled J500 under where the PSU would be if you hadn't just removed it. There's a trace of solder joining the two pads and you have to cut it so that the jumper is open. Shame Commodore didn't put some pins and a jumper block there, I used a scalpel.

Next find jumper J101 which is near the power connector and a load of upright cylinder things. J101 has three pins two of which are covered by a jumper block. You need to move the jumper block from pins 1 and 2 to pins 2 and 3.

Put your Amiga back together and, examining everything went well and you manage to boot up, open a shell and type 'avail'. You'll now see that the maximum chip ram is now 1047552 bytes (I don't know what happened to the other kilobytes but there you go). Time for that Hi-Ras Interlaced Oversampled Magic Workbench you couldn't have before.

**Martin Bahn**  
East Yorkshire

*Thanks for that handy tip Martin, it's much appreciated. We should point out, however, that we don't recommend readers follow this course of action unless they're familiar with the insides of the Amiga and are very careful doing it - getting it wrong will clobber your Amiga good and proper! We do not*



want to be held responsible if you damage your system, so get a pro to do it.

## CIA shock



I recently fitted a new Canon BJC bubble jet to my A500 and since doing so the mouse has

stopped working. It moves left and right but no longer goes up or down. It's really annoying. Can you give me any hints as to what's gone wrong.

Patrick Divan  
Bristol

It's very simple, there are two chips inside your Amiga, collectively known as CIA chips and it looks like they're dead, so move, keypad! This can happen by plugging in the printer while the Amiga is on. These two chips control the mouse port, joystick, disk drive, serial interface and printer and by attaching the printer without turning the Amiga off you've damaged them.

There are two solutions, one buy a new chip: try calling one of the Amiga repair centres such as Sillica: when we last checked they cost about £20.

Alternatively, try swapping the two chips around. To do this open the Amiga, remove the metal shielding and locate them - they're labelled CIA DDD and CIA EVEN. Gently lift them out and swap them over, if you're lucky the mouse will work. You may lose some other functions though, the disk drive for instance, but as you have a hard drive this might not be a major problem until you get a replacement set of chips.

## The future's so bright ...



I've just returned to the Amiga after several years away from it. Previously I had an A500 Plus, now I've just bought an A1200 from my local Escom store, and having had a quick glimpse through the pages of CU Amiga Magazine I have only one thing to say - the Amiga is far from being on its last legs as some people seem to think.

The power of the peripherals now available (SCSI CD-ROM drives, 040 accelerators) and the amazing applications around (FinalWriter 4, WordWorth

5 FinalCalc etc) make the products that used to be out when I had my A500 look really sad by comparison.

However, this is getting away from my real reason for writing namely, will the Lexmark 1050 colour printer work on the A1200? A friend is selling his PC system when he moves to the USA shortly and I can buy the printer off him cheap.

Paul Winters  
Glesgow

We're in total agreement with your comments about the current Amiga. Although Commodore are so more, and we're still waiting on hardware news from Amiga Technologies, the software now coming out is certainly of the highest quality it's ever been.

Unfortunately the Lexmark printer needs Microsoft Windows to work properly and as a result won't work with the Amiga. However, if you look around you'll find many other printers of equally good quality available that will, look out for anything that's Epson compatible as a good starting block for Amiga compatibility.

## Which CD-ROM drive is best?



A friend of mine has told me that computer CD-ROM drives are simply normal HiFi compact disc players that have been modified. Is this true and if it is how can I adopt this compact disc player on my stereo to work with my A1200?

Does the 'digital out' socket on the back of the unit have something to do with this? If I can adapt it which CD drive do you recommend I buy?

Adrian Poole  
Staffordshire

Unfortunately you can't adapt your HiFi CD player to work on the Amiga. The digital out port on your CD is intended for use with amplifiers that support Digital input - producing better quality amplification and sound reproduction. It's also possible that VideoCD boxes will be released that take this Digital output and convert it into sound and pictures for displaying on a TV, although this is becoming less likely as time goes by.

As for the best dedicated Amiga CD drive checkout Power Compacting or Hisoft Squirrel based systems, both of which are very impressive units.

## The great CD32 FMV debate

I would like to thank you for supporting our favourite computer over the last couple of very turbulent years. I am pleased to say that CU Amiga Magazine is currently my favourite magazine.

However, I feel that I must put Tony Horgen right on a Q&A letter in your February issue. A Mr K Walsh wrote in to say that he had a CD32 FMV card without its adaptor.

On close inspection of the whole module you will find that it actually consists of a shielded circuit board (the metal bit) and a loopback section with the CD32 coloured plastic around it. These can be separated and hence the loopback is lost. Just to help, the loopback has two stickers on the inside of it (only really visible with the actual card removed). The first has REV A and a barcode on it while the other has CDGS LOOPBACK and a barcode with the following number below it, B515293365480001000565. I have written to AT about this.

My advice to Mr Walsh is to contact them at their new address and see if they can source a loopback connector for him.

Sven Harvey, West Midlands.

Thanks Sven, it's always good when readers come up trumps with a bit of handy information. If any other readers out there feel that they can help out on any of the other problems that they read in these pages please write in.

## I'll be back, for sure

I am writing in response to my phone call to you about my letter printed (Q+A February edition 'CD32 FMV card') and your reply which you printed and repeated back to me on the phone. I have the FMV card, I rang Amiga Technologies as you said and they said I was right, it is a real one.

However it's just that mine does not have the 150-way female connector. Anyway they could not help me. I'm not waiting for a fresh batch of SX1s from the USA. I'm now flogging my card, someone out there with an SX1 will do.

My only options are to either get a 12" laserdisc player or wait for DVD due soon! It's a shame I cannot utilise my CD32 to its potential, what a waste of a good machine.

K. A. Welsh  
London

Okay, fair enough, you seem to have been right all along. Obviously what has happened is that the unit you have was retro-fitted with an gender adaptor which has since parted company with the main cartridge. Had you bought this from a shop, we would suggest that you return it and demand a refund, but we understand this was bought second hand from a private seller, so you probably won't have much luck on that score.

It is a shame that the CD32 FMV module never really took off in a big way, but with AT's plans for using CD32 technology in 'set-top' home video boxes, maybe something will emerge in future.

As for laserdiscs you could buy one, but it's possible that DVD might kill them off in the long run making your investment worthless and, unfortunately, although DVD is definitely a very good option official units either computerised or in a standard TV/HiFi format won't be released until this autumn, and even then they'll be well above the price you can get FMV units for but Hisoft's MPEG is on the way too.

## Send your Q&A problems to...

You can send your technical problems [or answers - Ed] to CU Amiga by the following means:

By letter to Q&A, CU Amiga, Priors Court, 30-32 Farringdon Lane, London, EC1R 3AU.

Email: Q+A@CUA.amiga.demon.co.uk.

Sadly we can't personally answer Q&A problems, so please don't send SAEs or phone us.





# Backchat

**Forget the cold weather, people are getting hot under the collar in this month's reader's debate. Went to turn up the heat? Join in and write in.**

## Put your money where your mouth is

How am I and other members of the Amiga-using public supposed to believe that the Amiga is still going strong and will survive the competition from Mega Drives, SNEs, Satems, Play Stations and PCs? It's very disheartening when you walk into any high street computer shop and find that the Amiga software display has been relegated to the darkest corner at the rear of the shop. And if that is not a big enough insult these shelves are only stocked with old releases. How can the Amiga be expected to survive without the support from the retailers?

**Andrew Radd, Essex.**

*A good point. The only way around this seems to be to keep going into these shops and asking for Amiga hardware and software products. Theo maybe retailers might wake up and realise that there is a huge market out there for Amiga products. It's not just Amiga users who are annoyed with this situation, software companies are also finding it increasingly irritating. Peter Calver from Audiogenic whose excellent game Super Tennis Champ is hardly*

*anywhere to be seen in the shops: is incredibly frustrated by the situation. He urges people to "vote with their wallets" which means that if we show that we mean business and we actually want to spend money in their shops this might get them moving. Or failing that contact the software companies direct for their product.*

*You've raised a valid point in your letter and we are hoping to look at this matter and clear it up in depth next issue. In the meantime turn to our points of view pages where Lisa Collins has asked around to find out what some retailers' policies are concerning the Amiga.*

## The price is right

I'd like to add some more points to a reply I read in your magazine concerning the price of the Amiga. Although you agreed with the letter's author that the price was high you said it was justified. I agree. Here, in Germany, the Amiga only costs 6500DM which is outstanding value for money compared to other current computers. Also, the software that is being shipped with stock A1200s is brilliant. I mean, look at PCs. Do they have anything like Scala or WorkBench? Can they

immediately generate titles for their home-videos without any additional hard or software? No, not at all! So why complain about the price?

I think that people are complaining now about the current price of the Amiga because for some time, due to Commodore's closure and other difficulties, A1200s (and CD32s) were sold for a lot less than their normal retail price. The price for A1200 (with a HD and 4Mb RAM all in one) at 990DM is brilliant and it is a very affordable price for a computer. The A4000's price however...

**Marc, Germany.**

## Cobblers

Call me a miserable old git, boning old fart or whatever else but I think the net wedding feature (February 96 CU Amiga Magazine) was the most crap, infantile, pathetic piece of journalism I have ever read. I'll never forget Mat Bettinson's worldly wise "super highway" quote "You may not take it seriously but you should it happened, it's real." - Cobblers

I realise that you have to cater for younger purely games playing readers but I am sure you do not not want every other type of Amiga user to desert to other publications. They will with too much of this type of article, it was the pits.

Unfortunately, I have no doubt that this letter will be ignored or published with some smart Alec reply. Be warned though, you are surely aware of the media perceptions that for every person that bothers to phone or write about something then hundreds or thousands think the same but never get around to doing anything about it. On the plus side ProCalc was the best cover disk I've ever found on any magazine.

**RD Armour-Cheli, Kent.**

*Why do you assume that the piece was aimed at younger readers? It was a topical article which was informing us about something which is really happening. It was the first wedding to take place on the net and we were there to report it, what's infantile about that? As for your warning that every letter represents thousands of unwritten ones - we've received tons of phonecalls and letters congratulating us on this article and only one criticising it - yours. Since our article similar reports have appeared in national newspapers and on television.*

## The dog's ...

I enjoyed your net wedding article (Feb 96). It's nice to see some romance on the net. I'm tired of hearing all these stories about the net being a cesspit of paedophiles and porno freaks.

**Barry MacDonald, Bracknell.**

### THE FAR SIDE

By GARY LARSON



"We're screwed, Marge. Big Al went out after attraction, the king of the street... And now he's gone."

### THE FAR SIDE

By GARY LARSON



Cartoon halls for the old rubber-stamp pag.



## Letter of the month

### The way forward

This letter is aimed at users who have been reluctant about upgrading and who complain about the lack of interest of software developers. I bought one of the early A1200s after owning an A500 for a few years. Then I bought a hard drive a while later. The point is, that one single peripheral completely transformed my Amiga into a genuinely productive and useful machine.

I used to think that a hard drive would just make file access faster and prevent me from stacking up floppy disks, but it is so much more useful. For instance I simply couldn't run programs like Real 3D, Imagine or play games like Worms, Alien Breed 3D etc. without one. Amiga Technologies should really not be selling Amigas without hard drives, although the Amiga philosophy has always been one of affordable entry models which grow gradually with users' needs.

Hard drives are essential if you intend to use your Amiga for any serious application and quite a few games rely on hard drives to make them playable. I would seriously avoid any games which I knew were not HD installable. Piracy is not an excuse against hard drive not being installable. If Amiga floppy users want more games like Alien Breed they should give a hard drive serious consideration. After all, a 3.5" IDE will squeeze into an A1200.

There is no longer any reason for not buying a HD. HD prices have fallen by a ridiculous amount in the last year. Looking through your mag, \$850MB costs less than £200, even 420MB is only £125 - this is the same price as only three or four Amiga games (two or three console games).

To anyone who complains that the A1200, with its 620 processor is now behind the times, the answer is simple, save up some

money and buy an accelerator - which are also dropping in price these days. There are bound to be some affordable second-hand 68030s for sale, with a lot of serious users looking for 040/060s. Even buy 4Mb of Fast RAM. It may sound a little harsh, but when you consider people spend probably £1000s on PCs, to upgrade a basic A1200 to a very useable Amiga set-up costs around £450 (or much less when buying second-hand), i.e. a 50MHz 630 + 4Mb fast RAM + 420Mb 3.5" HD. Even a small second hand HD, which would cost little more than the average game, would make a world of a difference, although as is often said repeatedly - upgrade to the largest you can afford, or at least three or four times as much HD space as you think you need now. You'll regret it otherwise. I know, I outgrew my 120Mb HD very quickly a few years ago.

Now that games producers have started to develop for accelerators, there seems to be a new lease of life in the Amiga as a games machine. The CU demo of Xtreme Racing really flies along on my 040 and it's great to play AB3D in all its glory. I don't think this kind of software will continue to be produced for long, unless a lot of people upgrade and buy the new software. The 'RAMming it home' article (CU Feb 96) makes a lot of sense. Let's hope that both users and the industry are listening.

### Forces combined

I noticed the interesting Breathless/Power Computing offer in your magazine. I think it's time software, hardware manufacturers, the magazines and AT themselves all pulled together more to stress the upgrade issue. It would be worth including details of games which benefit from memory and accelerators with the hardware and details of the hardware available with the games. This sort of co-operation

makes sense. I mean, where better to advertise your accelerator than inside the box of a game which would benefit from one?

Maybe all the magazines and Amiga Technologies should start a major survey of Amiga users. Discover how many have expanded systems, and what their configuration is. Things have changed a lot for the Amiga both hardware and software-wise since Commodore went under, not to mention the radical changes in the console and PC markets. In addition, the survey would pool the ideas of everyone who supports the Amiga and show to software houses that the Amiga is still worth investing in. A carefully designed survey organised by AT, in co-operation with the magazines - or wider press might benefit the Amiga immensely - it can't do any harm! I can't remember the last time I saw an Amiga survey, but things have changed so much lately, surely another one is due.

### Bad attitude

Recent stories about the attitude of some Escorn salespersons concerning the Amiga are quite worrying. I hope AT will take steps to ensure Amiga are promoted properly especially since every other platform is on display. Shop displays, are what catches the consumer's eye. How many more people are likely to discover the Amiga if it is not on display?

Finally if software houses make a hard drive and extra memory/processor obligatory for every release from now on (assuming the software was of a high quality, like the 'Doom clones' rating 90%+) and there was a kind of 'hardwired' software co-operation, how many people could honestly refuse to upgrade their system?

Gemrid Callaghan, Missouri, USA.

### Rammed home

I'd just like to mention a few thoughts about your Points of View article in the Feb 96 issue of CU.

Alan Dykes was going on about the min. spec of miggys, pcs and mecs. He stated that the min. spec on the muggy was 2Mb RAM and no hard disk (or heabouts). However, in my experience, I've found that the majority of Amiga users (in common anyway) have around 5Mb RAM and at least 1/2 Gig HD. It's pretty rare to find someone that has a base level machine or at least a base level whid.

I totally agree with everything Alan said in that article. But why don't developers just auto config their software a bit like expansion boards. XTR does it with no apparent speed loss... a friend and I ran it on both our A1200s at the same time and hardly noticed any difference. He has 2Mb chip no fast and 214Mb HD. I have 2Mb chip, 4Mb fast and 1/2 Gig HD.

Peter Kirby, Bernet.

### A pat on the back

I would just like to thank you for your magazine CU Amiga. I have found it to be useful as well as fun. The magazines here in the USA all

seem to think anyone reading them already knows all there is about the Amiga. Your projects have gone a long way to help me understanding the Amiga and computers. Now that the machine is once again in production, I hope to see more good things from you. Keep up the good work.

Tom Gower, Texas, USA.

### Double pat

Since my son had his A800 a couple of Christmases ago we have regularly bought and read various Amiga mags. These are all kept in a box under his computer desk. Looking back through the mags it was interesting to note that the one we have purchased most is CU Amiga Magazine. I think this is probably due to the consistently good balance and content of articles (reviews, technical help etc) and the quality and usefulness of the cover disk. It is also a change for a magazine to invite personal contact with its readers rather than just taking the £4 or so with a don't call us and we won't call you attitude.

Recently I had cause to contact your advertising department for help with a problem regarding one of your previous advertisers. I

had returned a faulty drive and was having difficulty getting either a replacement or a refund. Finally, and only after your intervention, I received a refund slip. This was only after they had been phoned by your Marianne Masters. I don't know what she said to them but it did the trick. Thanks

Ken Dryden, Cambs.

### Firm sale? We say NO!

As I am on a tight budget, I have been forced to stop reading CU Amiga Magazine as it has now gone firm sale. I cannot commit to paying out the monthly sum of £4.00 just in case I'm broke. Why oh why is it now firm sale? K. Simmons, Bristol.

*Firm Sale means that a newspaper has to buy a magazine and bear the cost if it doesn't sell. The opposite, SOR (sale or return) means newspapers return unsold copies of magazines to the distributor. CU Amiga Magazine is distributed by a company called Frontline, the country's premier magazine distributor. They definitely handle CU Amiga Magazine on an SOR basis. If you have problems getting the mag write to Mark Cowie, CU A, Frontline, Park House, 117 Park Road, Peterborough PE1 2TS.*



# Points of view

## CD-ROM - saviour of the Amiga scene

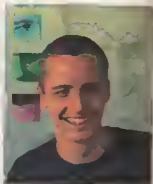
by Tony Horgen

Many people both inside and outside of the Amiga scene are surprised at the way the market has stood up over the past couple of years. Amiga users have always been a discerning bunch, they know what they want from their computer and won't be taken in by media hype and advertising alone, which explains why they bought Amigas in the first place, and is part of the reason they have not abandoned the platform.

loyal user base, but also thanks to the fairly recent introduction of affordable CD-ROM technology which has revolutionised the Amiga scene.

CD-ROM is the perfect medium for mass distribution of the Amiga's unique shareware scene. CD is the international standard medium for both computer data and music, which has led to very low duplication costs that mean CDs can be sold for as little as a fiver, or even less. With third independent organisations such as the Amnet playing a pivotal role in the compilation, management and distribution of the best Amiga-specific shareware, backed up by hundreds of themed CD compilations from other producers, the Amiga is free to exist, in some form, with or without support from the established commercial software producers.

However, while this has kept the Amiga scene going through what could have been very lean times, we still need to continue development of the core commercial applications - the likes of Wordworth, PageStream,



Photogenics, Personal Paint and the merry band of 3D rendering systems. If the financial backers of these packages pull out of the market, all will not be lost, for then it will be the turn of the shareware developers to pick up the gauntlet and keep on keeping on, running the show on their own terms.

© Tony Horgen is CD Amiga Magazine's technical Editor

Every so often, the state of the art moves on, leaving a wake of washed up and redundant technology.

Even so, every so often the state of the art moves on, leaving a wake of washed up and redundant technology, which is where many think the Amiga should be floundering. It's managed to stay on the boat partly due to its very

## Have money, will travel. But where to?

by Lisa Collins

I am sick and tired of the amount of letters we are starting to receive which end with those three little words "disgusted and disillusioned". What is causing this heightened level of unhappiness? The apparent lack of availability of Amiga hardware and software.

I found tales of incompetent shop assistants advising Amiga enthusiasts

if Escom took him up on this generous offer. Also, recent rumours that Escom shops had received a memo telling them to remove all their Amigas from their premises were a little more than disconcerting.

Judging from sackloads of mail we receive, there's a huge army of frustrated Amiga users out there armed with cash to spend on upgrades, new machine and software but don't know where to get the goods.

In next month's issue Alan and I will trail the country to find out what is going on, who is stocking what and where. In the meantime let me try to clear this confusion up.

Despite rumours to the contrary, Escom have confirmed that they are going to continue to stock Amigas and are committed to promoting them in their shops. Also, although reported to be stocking Amigas, Dixons and Currys, however, "do not stock Amiga products and have not done so for at least two years", according to Helen Sargent, Corporate Affairs Manager.



HMV's Oxford Street branch according to Trish Saunders "will stock all Amiga software and, whereas other smaller branches will have a limited amount of Amiga products, you will be able to order a particular game through us (HMV) if not available."

I hope that helps, until next month.

© Lisa Collins is CD Amiga Magazine's Deputy Editor

Despite rumours to the contrary Escom ... are going to continue to stock Amigas.

to buy a nice piece of hardware and little or no shelf space for Amiga games very worrying. One man in Bury St Edmunds even went as far as to offer his services, for free, to help his local Escom shop display the Amiga's talent. We've yet to find out



## Cover disks are saving the market not killing it



by Alan Dykes

Before Jonathan Anderson left Amiga Technologies at Christmas he stated his belief that magazines cover mounting full commercial software harms the Amiga. His point of view is shared by many in the software industry and, indeed, by many readers too. Every piece of software we cover mount is supposedly putting a nail in the Amiga's coffin – apparently no-one is buying new software because they already have all they need from our front cover. Oh yes. But does anyone remember whether there was some software in the Magic Pack by Amiga Technologies? Obviously not, it could have destroyed the market!

Let's straighten this matter out. There is still a healthy market for word

processors, databases, spreadsheets, rendering software etc. and why? Because we've been promoting them all through the ups and downs of the last two years. My theory is that if people hadn't got this software from magazines, if they hadn't been offered cheap upgrades from cover mounted software, the market would be in a worse state than it is in at the moment. Buying commercial software on the front cover of CU Amiga Magazine (or any of our competitors, or in the Amiga Magic pack with its superb utility suite), makes you realise just what's available and just how good it is. Programs like PageStream 2.2, Image FX and Imagine have encouraged many, who previously may not have considered investing in this sort of software to upgrade, to continue to use their Amigas for serious applications.

What about games? We have not cover mounted a commercial release yet. You have never seen a 'worth twenty five quid' badge on a games disk, on any Amiga magazine I believe. That's because we (and the other magazine publishers) have an agreement with the games publishers not to do so. This agreement dates back years and no-one has yet broken it. But consider this: where has it got us? This 'NO COMMERCIAL GAMES!' crusade has not succeeded in saving the games market from a situation where a title like *Leading Lap* was not going to be released – despite good

scores in all the magazines it was reviewed in.

My indignation is tempered by the fact that the two markets (games and technical) are admittedly different. The technical market is upgrade led. People with version 1 of a program inevitably upgrade to version 2 and so

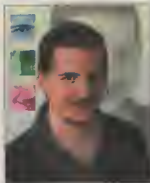
**Name me more than a handful of games where the sequel was better than the original and I'll eat my Doctor Marten!**

on. They want the improvements and they want them now! But name me more than a handful of games where the sequel was better than the original and I'll eat my Doctor Martens. The games market is not upgrade led so the argument above holds more water in this climate.

As a magazine we cannot afford to pay the full development costs of a piece of software, not at £4.50 an issue. But we do showcase the best new software – either by putting an older full version of a utility or a demo of some software on the front cover. Don't forget though, these programmers, publishers and developers still have to make money from you going out and buying these products and upgrades!

Alan Dykes is CU Amiga Magazine's Editor

## Workbench 4 – just begging for it!



by Matt Bettinson

The commonest problems we hear of are anonymous crashes, garbled text and such forth. AmigaDOS will help out under some conditions to indicate which program is failing but conversely there are plenty of errors which can't be tracked down with any method

other than an exhausting process of elimination. I have found it difficult to create a reliable complex automatic Internet system on an Amiga that doesn't crash at some stage in the night.

Of course the problem isn't the Amiga's fault as such and Commodore provided tools to help programmers find illegal memory accesses. These tools, known as Enforcer and MungWell, require a Memory Management Unit or MMU to trap and document errant memory accesses (crashes are usually caused by programs writing to parts of memory that are otherwise engaged).

The trouble is the Amiga doesn't come with an MMU as stock – least of all something like Enforcer built in. Currently, the most reliable operating systems are Unix variants and for this reason they are responsible for running most of the Internet. The feature of Unix that makes this reliability possible is known as Memory Protection, something that the new Workbench 4 is begging for. This means that tasks are

controlled by an MMU so that they can not access memory outside the area they have allocated. The net theory as a task might crash itself but it can't crash the machine. Interestingly, this is why some Unix ports to the Amiga aren't nearly as reliable as the Unix counterparts. In short, Unix can handle the buggy code but AmigaOS can not (AMSAAC

**Currently the most reliable operating systems are Unix variants and for this reason they are responsible for running most of the Internet.**

for example). If the future Workbench 4 has the strong features of previous incarnations coupled with memory protection and other modern OS features, it would truly be a force to be reckoned with.

Matt Bettinson is CU Amiga Magazine's technical Staff Editor



# Next Month

In **CU AMIGA** Magazine.

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14th April 1996**





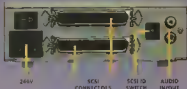
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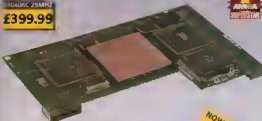
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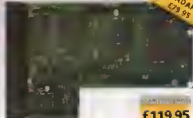
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